

SRITENIE DISTING

1

11. A kerup in Herve Sun, Yingming Then, Sen Yu Liu, Thenghus Turner, Leah

 $\pm 11.7 \times 10$ mpositions and Methods Felating to long Specific Games and Proteins

31305 DEM-0241 <140> US 10/002,344 V1508 US 60/242,998 k151: 2000-10-25 :160: 277 <170: Patentin version 3.1 :210: 1 -:211:- 898 <212: DNA +213: Homo sapien 4220% <221> misc_feature $\times 2228 - .124 \overline{1}...185$ 32238 n a, a, a or t 42205 <221> misc feature $0.025 = 0.773^{\frac{1}{2}} \dots 0.773^{\frac{1}{2}}$ 0.0235 = n = 0.3, 0.3, 0.5

k400% 1 tttaaagaat agotogtgta tatgattiit taaaaaaaaa totaccaaat caaataaaga 60 agthologgga gtthacoogg tgttttotan agaadbaagg tattbatatt gagatortt. 120 180 nnnnngtgaa atggagatat toaacaaago accutgtggg gattagatga gattgcacat 242 300 rtgartyict agam'atagt aaggggtidar tgtttiritot toartoitea ggaaaaatttg 3.50 attgaacaag gatagaaact tigattotag ggacagaagg tottoagaag totttgaggo cagagggort gtratagaan tghagtgtay gttrattaaa angotgthat notaahgttt atocacagta totaatagat itaaaaaggaa gacaatatgg cacagactat tioggaaaco 480

tatocccatt otgocaacao datatoccta tidotoctoa gactattica ottataagot.

```
thothittic ottakk mi akkkamiska nathamaka kathigaggg nookhaatg
galom nomanda inggoring mushi ostor mitong lagor awas no latinin balong lagborologa gbi
dutgrapato byłokatigo biokyżopot jąkratycht gałobatot kigradatok
thrigalaaggi raalustanda ohjitootto tojagttoot hiigtaaabtg gootobaatti
tat migotgo hinnintoga tippaatitgo giptatgibi tabiatagat tomittggada
                                                                     840
talagaaata aagaatatat oigiagotai tiigitaaan taagaatgit tiaaaaata
                                                                     598
<2103
      10.10
solic: DNA
<213; Homo sapien
< 2200 >
<221> misc_feature
       125 ... 186
<2223
<223> n= a, c, g or t
<400> 2
tttaaagaat agotogtgia tatgattitt taaaacaaaa atotaccaaa toaaataaag
aagtootggg agttoacong gtgttttota nagaarbaag gtattvatat tgagatoott
                                                                     120
                                                                     180
nnnnnngtga aatggagata ttoaacaaag caccotgtgg ggattagatg agattgcaca
                                                                     240
                                                                     300
totigactique sagagtatag taaggggtea etigitteete ticaeteete aggaaaatti.
gattgaacaa ggatagaaac titgatteta gggacagaag gtottcagaa gtotttgagg
                                                                     360
                                                                     420
ccagagggod tgtcatagaa ctgcagtgta ggttcattaa aacgotgtca tcctaatgtt
tatocacagt atotaataga titaaaaagga agacaatatg gcacagacta titoggaaan
                                                                     480
ctatgoccat telgocaaga ggalateget alliggtgglo agactatile acttataagg
                                                                     540
                                                                     600
ttiottttt oottaagtoa taaagattaa patitabtaa aaatttgagg gtocattaat
ggacticicae auggetitics foitteetit gagetggatt castiticaet gagticizgag
                                                                     660
                                                                     7 ...
tuotigrapat organaalig orinagammi tigganatymi tigaattatti tatigoaaato
attigaaaag gcaaagtach anigticitt hittgagittin ticgtaaact ggittictaat
itatotyolg officiolog afocaattig tgoclatgic tfactataga ffoffinggaa
                                                                     340
ataaagaaat aaagaatata tergiagiita tiittattaaa sitaagaatgi tiitaaaaatat
titaligiaa aadaaaatto otitgiioo oolagaaataa aaaaattitt tit
```

gtatiaatit ttitilaila ttittailit attaaaatat gggggootga agtittitio

inningseee eestatanin	र हर मध्याच				1.40
:400> 3					
gotokataos itutitatio	tgggaccaag	utggagagat	gagtototat	stgtggaaga	60
pottiggaaga poppaotpag	ggttgttotg	aaagggatct	cacatggatt	gagocataac	120
stagaqocaa gagaagosag	atttgstagg	agaaagtoot	gtoagoatag	tcaaacactt	180
aggaqgagta aaaaggtgta	. titiliyoga	.agatggtgt	gatbabattt	ttatcaatta	240
atotopanos tagggasaaa	gagttaacat	ttgaattttt	ctcagtaaga	atctactcct	300
cagggaaagt tagogtttga	aaaactctaa	ctagaaatcc	astttssaga	ggatgtataa	360
gcaagtgott aagtatotag	actagaaatt	ccottcataa	gcatgaggag	tgstggaagt	420
gattitteat tggtgaaatg	ggtggtttta	aagttatgta	gatggaetgg	agatattttt	480
cototactot Egoatgaaga	aatatgtott	aatgtagata	gastggagat	atttttdd	536
<pre></pre>					
<400× 4					
Stocatotoa adadacaaag	ggatdaaggt	cagatgaggt	caagagaaga	utgaggaact	5 0
gtgccagact gaggaagatg	aaggagacat	gacatttaat	gtttotgaad	tggatccttt	120
cotatgaaac tactggaaca	actggcatac	ttgaatggaa	tttgttgatt	agatggtags	180
aatgtatcag tggtaatcac	oogasttiga	tgagrgtaat	acggtgatgs	agtaaaatgt	240
attipittot agaaaatasa	caccatogtg	gccgggcacg	gtggataata	cctataatcc	300
cag					303
<pre><010> 5 <211> 519 <010> DNA <213> Home sapien</pre>					
k400x 5 gtaogaogty godoagtutt	ggut castgs	aasagssass	torroggggtto	aagsgatts:	60
ostgootsag istrotgagt	agotgggatt	aataggogoo	tgacaccaca	cotggitaat	123
ttttgtattt ttagtagaga	cagggtttca	tuatgttggs	daggatggta	ttgaactoct	180

gadot igraak notan magaa noggo marin kaagtigin aa gastatagagi atgago waa	14.
gugorugas na anganggi an guanton ma gaaabaaada pahtitabing babbabngia	3 4 1
thangothan baaagtoggg tgattabhan tgatabatig mabbatota atbaababi	3 A C
r riacticaag hangsiagni ghtisbagtag bir rahagga aaggaticaag hidagaaaka	425
ntaaangtoa tgistootis atsutootsa gistygoasa gitsoloagi siitsootga	÷50
nombabotga bottgatoop titigttitti gagatygag	819
<210> 6 .1:1: 781 .2:12= DNA .213> Homo sapien	
(400) 6 tatgaaggta gatgocatat atgtttacst tgocactgta titotactgt citacattgc	6 0
tootaaogta tatoatgago tottaaatat tigitgaaga aatgaactag ogtatiiliga	120
taastataat gigigaagss ooiggiigsg toigiigsas asiggaalta aggggiiaaa	180
aacettitee ettgetgett gagaatetga tettiggitt agesaestag stotgitass	240
etggsaarea ggtaagaget taggeateea caafattget aageaasact gettaeggta	300
aaaatgatoo tiggtiggia aactgcatoi gaaccaggaa gaaatatgaa iqaqcigtaa	360
atgictgata ggavaettig gevitoeetg aatgeagitt ettettggga accetanaaa	420
ctataticaag aattigttaca agagatactig getigettaag geaggagget telltietigage	460
cagggoagot coogtacoto cotgatgtgg agottaggot tigitacotgg aactacgticg	540
igiggggaga caacagicoo cagaaaggia igigagolgi calligigca aacalgcaga	600
gooditgata agaggaatto tigaigoigo poigoiggaa agoiggaaag aaaigiggoo	660
tgtggtagos ligitgagtus asaigtitag itaasitaaa aagassetig giggssasta	720
aacacacott attitoattia atgotogoaa caacttigag agacaggaaa taccattiic	780
	781
KDION T KDION 996 KDION DNA KDION Homo sapien	
tratagaagi cagggaaagg aaggagitgg riggtggagg gtgctcitga craggagtia	8 I
aacttuttto astgacetts tigganaaag oggonaaggi agaactggsa gastgggags	120
taaaaaggggg aggaaaagga otoaaatogo atggtotoot dagtootggt gagagatitg	183

antgragging goggingagi itoggraanda ohtadoritga toodatabaa aadgginadb	
tagagn goat nggmuantot ghountgott uningguikao thootggida gaadad gag	36.
m yotayyog tiyigggaag goggggaaaa qqayaggtot ogayocaang titaggggg	400
ambreamor gunattagos gragorguag calogagiti gagggaacca gostosagaa	460
grogodicaa aligotgoto aggggotigi tggagodigi gtdategida dadaaagaag	540
acaptocogg ggaaaggiqa totrgacaet gbaqiyagto togbaggaco tbautgibba	600
gtgccaccag stodaacgtg tggstgstgg gagtogtgst toocaaggag gtgtocgggg	660
aegtggaetg etecetggat enggtentee agagacaaet tatagttete otggaettee	720
coataggatg ottotgacgg agtototgaa gagtttocat accagtgtto toottoactg	780
agetetecet eegeetette etgeetasta acatgugagg gaaggegett gggetgetee	840
tgottootoo tgggcatttt coccotttto tcacattoto clootiggit aatgtgagat	900
casataacac ccccgtgggg gcagagaggc agacactggc aggagcgggg aggtagttgg	960
ggggcgggcg ggcgggcagg ggaaaccott ctmcgg	996
<pre><210> 8</pre>	
<pre></pre>	
<211> 1678 <210> DNA	6 0
<pre></pre>	60 120
<pre>42:1> 1678 42:0> DNA 42:2> Homo sapien 44:0> 8 atgougetca gugacuguca ougunggoag ogggoagog agaggoaagu tocaggaggu</pre>	
<pre>42:1> 1678 42:1> DNA 42:3> Homo sapien 44:0> 8 atgotgetca gtgactgtca otgttggcag cgggcagogg agaggcaagt tocaggaggt accggacaca ggatgaagog ggotgcatot toccaggagg taaaacaatc catgaaatgc</pre>	120
<pre>42:1> 1678 42:2> DNA 42:3> Homo sapien 44:0> 8 atgotgetca gtgactgtca otgttggcag cgggcagcgg agaggcaagt tocaggaggt accggacaca ggatgaagcg ggotgcatot toccaggagg taaaacaatc catgaaatgc actggacttt acgacgtgoc ocgaagcatg tttgtactgt octocaactg gttacttcag</pre>	120 180
<pre>c2:1> 1678 c2:2> DNA c2:3> Homo sapien c400> 8 atgotgetca gtgactgtca otgttggcag ogggcagogg agaggcaagt tocaggaagt acoggacaca ggatgaagog ggotgcatot toccaggagg taaaacaato catgaaatgo actggacttt acgacgtgco ocgaagcatg tttgtactgt octocaactg gttacttcag ccagttacca actgttccag aaaaggagco aagacaaagg agacacgttt tatccgtgga</pre>	120 180 240
<pre>c2:1> 1678 c2:2> DNA c2:2> Homo sapien c400> 8 atgotgetca gtgactgtca otgitiggeag egggeageg agaggeaagt tocaggaggt aceggacaca ggatgaageg ggetgeatet toccaggagg taaaacaate catgaaatge actggacttt acgacgtgoo cegaageatg tilgtactgt octocaactg gttacttoag ccagttacca actgiticcag aaaaggagec aagacaagg agacaegitit tatccgigga cccaaaacte tggegeeagt cacggactgg gaaggeagec tideottggi gittaateat</pre>	120 180 240 300
#211> 1678 #212> DNA #213> Homo sapien #400> 8 #abgodgetoa gogactgoa obgologagagagagagagagagagagagagagagagagaga	120 180 240 330
#211> 1678 #212> DNA #213> Homo sapion #400> 6 abgordetea graactatea obattagoag oggocagoag agaggoaagt tooaggaagt acoggacaca ggatgaagog ggordeatot tooraggaag taaaacaato catgaaatgo acoggacaca acagacgoo oogaagoatg tilgtactgo ootocaactg gttacttoag coagttacca acogocago cagaagaatg tilgtactgo ootocaactg gttacttoag cocaaaacto tagaagoago aaaaggagoo aagacaaagg agacacgoo taccottago gttaatacat tagaaggatg cotocogat tactcacca ogttocaaag gtgocagac acagaaggaac gcotgootta gtcottcaco ottagogaa agtcoogott tooragagaa aggacaacac	120 180 240 300 360 420
<pre>4211> 1678 4212> DNA 4213> Home sapien 4400> 8 atgetgetea grgaetgtea orgringeag ogggeagegg agaggeaagt tocaggaggt aceggacaca ggargaageg ggergeater terragggag taaaacaate cargaaatge aceggacaca aergriceag agaaggaarg trugtanigi octocaacig gitaericag caagitacca aergriceag aaaaggager aagacaaagg agacaegiit tareegrgga cecaaaaace tggegeeagt caeggacigg gaaggeagee treestiggi gittaatear tgeagggeig ceterorgat tarteacea egitteaaag gigicagace aegeagggac georgeetta greetteaer ettagrgea agreeggeit tociggggea geggeaacar gettiaaaag gattagagee tgitateari caerigetan ageaiggeet titaaagact</pre>	120 180 240 300 400 480
<pre>c211> 1678 <221> DNA <213> Home saples 4400> 8 abgoldetea graacigtea orgriggeag ogggeagegg agaggeaagt tocaggaggt accggacaca ggargaageg ggorgeator toccagggag taaaacaate cargaaatge actggactit acgacgtgee ocgaageatg ringtactgt octocaactg gitacticag ccagitacca actgitecag aaaaggagee aagacaaagg agacacgiit tatocgigga cccaaaacte riggogecagi cacggacrigg gaaggeagee troccitiggi girraatear tgcagggorg constengat tatteaceea ogrificaaag grigcaagae acgcagggae gcctgcctta grontteace ottagiggea agroogeti tocciggggaa ggggnaacan gcrifiaaaag garragagee tgitateach caccigetan agcarggeer titaaagaer atamacters uttacaatan coccattita orgrigotaa agcaagaea gcciiraaaa</pre>	120 160 240 360 420 460 460

nortyragaa iggintoggin tgragintti magnottiagga oggetgaata iniggagalaa 🥏 14.

ជាក្រុង ប្រើប្រ	र राज्य बृङ्गांच कृत्य	și manurili.	organia in in.	contaggaag	na ogla stor o	~ ~ .
ag magin mada	ognin ggalgot	agrijaca obj	garagtgagg	t oot gogaga	otomotgong	640
tgtcaagatc	Addt it intr	ggagtgtat	tittit grgug	adgat gaddd	aggotocaac	300
aagu coonga	gragraatit	дэдд хэдстэ	idalides i	gitocotcaa	autugatget	961
<i>वृत्ववृत्यवकावृ</i> ष्	er aatiggeag	agtggagtin	nangtawang	tt ggst.ogaa		1025
t poppagaet t	pubappangs	ccagcageto	agtifttingg	rcaggaagtt	ggoogagaag	1080
raggaaraga	atgaccaata	castecaagt	sanogt tita	catggaatca	aggtaagtgg	1140
ttg:caaact	Jaussassas	otgoagottg	totooggatt	cagecatest	aaaactgaaa	1200
gotigoagoca	atgoogttot	gcaggacaaa	tototoacca	ggactgagga	gaccatgcga	1260
tttgagtoot	tttestesse	cttttagctc	ccagtetgee	agttotacct	tggccgsttt	1320
gtecaagaag	gtcagtgaaa	gaagtttgac	tootggteag	gageaccete	caccggccag	1380
ateattaatt	tacatggatt	ctatgacctc	etcageggee	ottotgaagg	aggtggccgc	1440
aagggatgag	ggeagtette	tggctgagaa	atcatogotg	ctgcctgagg	accototaco	1500
geoccagoat	teagagaaga	aaccagaaaa	agteactecg	ccacctccac	egocacotos	1560
accacctica	ocaccaccac	cacaatooot	ggaattatta	ttactcccag	ttoctaaggg	1620
aagagtttot	aaabootbooa	attpaggtat	ggcatitttt	otttoaatca	togtgtaa	1678
<210 > 9 <211 > 659 <212 > DNA <213 > Home	o sapien					
k4005 9 cccacataaa	tgoocagato	ctacccattc	aaadootdat	atcattqqca	taaatattat	60
	tgganngost					123
	apptittaagt					180
gtotaactta	адаазасасс	cagggaggag	aat acaggat	actgacatto	agaagaggtt	240
tatttttata	tattatatat	gtoogtaast	totaattgag	ractaaatgt	acaggtgeta	300
agasaaaggs	titodabaaa	taatataatt	totomattgo	cccaggggtt	aagcaccctg	360
tacticcaaag	gt cocaect t	tggtgaaaag	cagagotoac	tggaaggtgt	tgttatagas	420
tinonatggaa	acctgaaatg	otgitgaete	tragortgta	ccattggtac	addatttatg	4 5 C
agcagcagca	gagaattogt	cantggatg"	gtgastossa	gootocasts	tcagggcagg	540
attoagggtg	acccagaagt	tigititaga	aataaacctg	ttaatattot	taacacatta	ė.

_

region in early, earling page to a granger of calebraic grant in the engine reaction and earling the	- 5
sulla lu sulla 947 sulla DNA sulla Homo sapien	
(4.0) 10 apanggingt igintgigaa paaaalugba totgpagnoo ipiabagitti guanggittii	60
tiragniting atarotabat patotiging ggingthapt actgoropop atttachige	12.
gagasaactg yydothagga aggragtgag aaactggaag teagccangt gtcaggacag	1 å j
gagostggat etggeobaba tötttiggitti iggittitgea eacagotgot götgggagot	240
ggggreaggg caggeaggtg petectetet ggpeteagee tegtgggaaa gettgggeet	300
caggtiggagt gaggatgtot tigggtigiato thotogtoto ggotottigga cocagoaggg	360
groggagggg gattlettaa gggaggggg titttoagaa alggaraggg astiteggga	420
coanggonge ceascheagt gaagtengag gygagninen ggaaggeatt tecatongte	4 6 0
datgtgttot aagtoagtgg adaaltaagt ddagaaaddt ootggadtta aaaagdaagd	540
adogecagga tocotqgggc tgcagacago otogggggtt ttgggagggot ggoteotcag	€30
gnanceatga aggaaggtgt potggggtos gtattcagad deaaatgeod gnagggadoo	660
tragggtgod titatolari ratgtotora raravilgri ggragagetg ggacaagtca	720
ctaacootot gigigacoto igalicogoca iggaaaaaag agigaalaga alaaaloali	780
tattimoagg glaggitoit ggggiggiag igmogagott gggigagiot coaccostic	840
gatttaggag ocgatgeest ggtgeggats folkstotga gelgagegie etseastaag	900
traggewowg wgwwegtgew gestaggger ggtgteewyg loedwoo	94=
<pre><2105 11 <2115 577 <21125 DNA <21135 Home sagien</pre>	
k400s 11 graantstad aptgstitiog stoacgaged gaaacttcaa gittochtst tynnagoaga —	€ 0
guttgggttg oggtogotgg aaaauttgat gogoaougaa atotottggt otgtgoatga	::::
ggangagigg atocagette tigiottygo tototgitot otgantgeet tgtactitti	180
gutttiotat uttacoatit tittitggti tgotiticaci gtgaataata tattiicato	240
titiostigos stigotitit iggotgasag aaaatggiga aigsasassg igggigsagi	300

वृष्ण्यकृत्यार वृक्ष राज्ञारण कृष्णका वर्षा क्षणकारकार । राज्ञारण का कृष्णकार क्षण कृष्णकार । राज्यकृष्णकार ।	\$ * J
និងសង្គារាធានគុរា «នៅ កាន់ហើយទៅ និងស្លាប់ បានផ្លាប់ ប្រធានធ្វាល់ សម្រេចប្រធានធ្វេច បានបានធ្វេចប្រធានធ្វេចប្រធាន	41.
in into the group great in the agricing in thingggang of her and unit groguegasses.	4 5
ag moangaa agnicaaggi bogagicito in icidagag ggotacotty taatgolgtig	1.41
gradagnata tataggaaga tagsawaggw wastite	877
<pre><d10 +="" 10="" 3025="" <d11="" <z12=""> DNA <713 + Home sapren</d10></pre>	
<400> 12 grettgetet traattgiaa etitacagig tittogetea egageegaaa oticaagito	60
cotttttgoo agoagagttt gggttgoggt ogotggaaaa ottgatgogo actgaaatot	120
ottggtotgt goatgaggaa gagtggatoo agostottgt ottggototo tgstototga	180
algeoligia elilibigett isetatetta mealitilit liggilliget iteaetgiga	240
ataatatatt tipatotito oligooosig officiliggo igabagaaaa iggigaalgo	300
acacogtiggg tigcagugagg gettiggtigne tigctlangtigg geagettiena betigtiggetig	360
gottattiggg otaettiggag ocapagaate attgetgage teogatgtgo cagagagten	420
caggodatty yygocastor totagotggg gaatottaag tocagotttt gygatgtoal	480
notosogtgg agggggagot satgaaagts saaggttoga gtottootoo ssagagggo:	540
accongraat googhggggg ggngngngng ggggggnggo aagggaagon onghoagoon	600
tggotatggo tgatgocagi nagggicata ganacotgit igitomocoo mocoigocac	660
aaacgitgag gacigigaad attaigicac igigaddigd tiadaaiggi aadtaagogi	723
taggcagaag gggttgagga ggggggagan alaggolott olgtaalagt algagtging	780
acatggtgtt otttoccoto octtttaget attgaaacaa tocaccoggt agagtgaaca	340
gottgaggit gatootggon tgtgataaga gonaggtoag tataottgit agggadatgi	900
gadaganeth neogeouanae typagnatte acadeacott tootggaset cotgtcanet	1467
ograggtvag ggagttatgt odvotggggas obcaggggott gtocagagot abboabagtt	
ituralaust sesäässääsu säärittägää ästutaggas ätitsatets eräääääää	1383
aatraaatin otggaagagg araagaaaga otgaigtagg aataaagtto ttttaaani	1140
dangggtgur rattgraggt tatraaaaot rabttggtga abortgaaga gggagatggg	1000
titggiggaa aiggittinde dadkigdota titggodtot titalgatgo tiddaaggaa	1260

in obtogalation agricumagnina (kaaluulaaano oranganusti nin minginzaka agragnonob	1311
tion regulgo i instructiggar ogsom ggravninget ethiogere hermideltiggi det kegdineg.	lie.
awan wangaw digograp ongo gowa oronon o ongoniwigos no onahwoons without on	144
aagti sigaa aasintoo, oo ag moon ba'' ingastoogo ongo stiotg osantgoost	1501
ggtonaagno achatotgot catgactgaa ottagagtag pottogtotg goonachttt	1960
atetgetorg actoacctor agrigoritist inattoffic greateerigg toffitteaga	1620
greataasat tiguttigida prottattai gaaaaaseaa osastiiggig goottoigit	1680
garnutgaga caqasortus ugugaacaa aaggotatgu goagondago ittigiotood	1740
tgoragostt gtottarada nugtgttgtu catogtatot gtagootggo satacootag	1800
cagitigeett cetateetea abtacateac algeittetg gootoaggae elltigeacat	1860
getgittaig etaetiggag igittigite etticiteae ecteagecae icectoigga	1920
ctgcactcca cagggcagaa gctgaggatg ttcagaaggc caaacggagt tggctgccct	1980
gtgggaccca agegagitgt asacattetg getteagatg taaateaaag geagageeet	2040
gagttttagg gcagagaatt oottotatoa gototgoagt gagoootoas aggoagaoto	2100
gggcccaaat aragoctagg (gotgtttät gtattigaaa gtatttaagg otggtoctio	2160
tgt.categgt eetroaaagt ottotattas Artilgggas tgtggtatat agagttosaa	2220
atttetttet ereetagage aaatggtite agtitaetgt aatgearaat aaacatgtaa	2280
acatawatag grasactica gaucaggitt tourigtago tiagotitoi oigotaaggo	2340
constituting gttttigggt oggstgtgsto beaggstatg etcagaeteg beettbatba	2400
controllect ggentgegag geggtealgg etherleging actealectic giggeacigg	2463
ggattgcagg gaggcatggt gatgtcottt tocagtcaca aggctggact gccaaacgaa	2523
otgoacagat tootttocag tgooccaago tgaaggaaag ogtgatoagg aagcaggcag	2580
cagaogtatt tgaacccaga catgetegag eecstorotg agcaggtgtg aaattatgta	2640
tgdageteca tagetecaet gaggattetg aagtgateet etgeacgaea etteneggaa	2700
ataagtggaa aagottactg catgastgaa aagtasgtat sagtestgsa seestlaggat	2060
tgovotggas tettgrotaa astgiitgii gitgalassa gostsagaag siggaigssi	2823
ttaagooatg gotagtgtgt ttaaoogato cotitiatga agatottgta agogogtggt	2881
autagresas taigstiti" aastysussa yssagagsaaa satagitasi ygagagasat	2947
tiltgtcatt contggcolo tgttlattig caaaaaagag laaagtgtta colgcaagig	3000
guicagugig igroggggig traggorgra gguatgigag ringitraaag gottguring	3060

no rang rago lagtor gagag or ricagaggu oga angot gg gg toot got g gaagogut go	3 7 2. 3
giggatgaag mashiygga giristitoto turtustaaggist igaabaa	Hle.
tttaliggig nintggrömmaggrötagia alanagorat grigggtgiggt laggatoara	:24
aaga mattum aa grina grinni baa migtutu turraagatgigi tortigaabbb qahaaggtiga.	1300
t jaagagity gigoiggoag gittaagaaa araaacabaa aacbaggiig gggigoigai	3360
tragtgoott gotgoottiit bagatoooto oppigaabig otggoabitg atgittigagb	3420
tattititgia ocigiototi otoaaaotag aigataaqig gootoagggo agggastasa	3440
tactorigag agetgertya getogaggty titattitor toagtaagca titttitoa	3540
ggagcatgae itggeteaaa aasacaaaaa gaaaaaagaa acceteeeet caatttacet	3600
gtgtotaaac titggtgaat tattotooca totgoottot gggcagagga gaaatgtgga	3660
atgeateaag ttsaaggtet tggtatitaa gagetggett taaaggttge catgttaaca	3720
attgt	3725
<210> 13 <211> 1299 <212> DNA <213> Homo sapien	
k400> 13 tacacetaaa tattaatate tagaaattat aaaratcace agaggacatt aacatatate	60
	60 120
tacacetaaa tattaatate tagaaattat aaaratcace agaggasatt aacatatate	
tacacctaaa tattaatato tagaaattat aaaratcacc agaggacatt aacatatato aatttotagt taagagtoac aaggeettto tittocacga gcaaattoat titgcaccat	120
tacacctaaa tattaatato tagaaattat aaatatcaco agaggacatt aacatatato aatttetagt taagagteae aaggeettte titteeaega geaaatteat titgeaceat taegataaae ataacaatet eateaggaet tetteataeg tetteeettt eteateeaet	120 180
tacacctaaa tattaatato tagaaattat aaaratoaco agaggabatt aacatatato aatttotagt taagagtoac aaggoottto tittocacga gcaaattoat tittgoaccat tacgataaac ataabaatot batcaggabt tottoatacg tottocotti otcatocabt gitacggito ataaagbaba aagabatto aacaaagbag cotgiggoig gaactgoagt	120 180 240
tacacetaaa tattaatato tagaaattat aaarateace agaggacatt aacatatate aatttetagt taagagteae aaggeettte titteeaega gcaaatteat tittgeaceat taegataaae ataasaatet eateaggact tetteeataeg tetteeetti eteateeaet gitaeggite ataaagcaca aagacatita aacaaagcag eetgiggeig gaacigeagt tittteetti ggeaaagaaa gcaacigace etggicacce cataceetaa agigacigic	120 180 240 300
tacacetaaa tattaatato tagaaattat aaarateace agaggaratt aacatatate aatttetagt taagagteae aaggrettte tittoeaega gcaaatteat tittgeaceat taegataaae ataanaatet cateaggaet tettoataeg tettoeetti eteatoeaet gitaeggite ataaagsaca aagacatita aacaaagsag eetgiggetig gaactgeagt tittteetti ggcaaagaaa gctaetgaee etggteacee cataccetaa agtgaetgis agaatacaga tageteeeta accatgetet eetactetag ggacaatgot gaggggteti	120 180 240 300 360
tacacctaaa tattaatat tagaaattat aaaratcacc agaggaratt aacatatatc aatttetagt taagagteac aaggrettee tettocacga gcaaatteat tetgoaccat tacgataaac ataacaatet catcaggact tettocatacg tettocette etcatocact getacggete ataaagcaca aagacatteg aacaaagcag cotgtggetg gaactgcagt tettocette ggcaaagaaa gctactgace etggtcacce cataccetaa agtgactgta agaatacaga tagotcocta accatgetet cetactetag ggacaatgot gaggggtett aggaaagtte teataccetg accasatgat teccetteta gagtcaatce tecaagaact	120 180 240 300 360 420
tacacctaaa tattaatati tagaaattat aaaratoaco agaggaratt aacatatato aattitetagi taagagteae aaggoettio tittocacga goaaattoat tittgoaccat tacgataaac ataacaatot catcaggact tottocatacg tottocotti cicatocact gitacggite ataaagcaca aagacatitig aacaaagcag cotgiggoig gaactgoagt titttoctiti ggoaaagaaa gotactgaco etggicacco cataccotaa agigactgic agaatacaga tagotocota accatgotot cotactotag ggacaatgot gaggggiotii aggaaagtii titataccotg accaatgat toccottota gagtoaatoc titoaagaact agocaagaati aaaacaaaga toaatcatto aagottacta tagotigati titittoago	120 180 240 300 360 420 480
tacacctaaa tattaatato tagaaattat aaaratcaco agaggacatt aacatatato aattitetagi taagagteae aaggeetite titteeaega geaaatteat tittgeaceat taegataaae ataanaatet eateaggaet tetteeaega tetteeetit eteateeaet gitaeggite ataaageaea aagacattig aacaaageag eetgiggeig gaactgeagt tittteetit ggeaaagaaa getaetgaee eiggicaeee eataccetaa agigaetgie agaatacaga tageteeeta accatgetet eetactetag ggacaatget gaggggteti aggaaagtit tiataeeetg acceaatgat teveetteta gagteaatee ticaagaact ageeagaatt aaaacaaaga teaateatte aagettaeta tagetigate tittiteage teagataaaa teagaaacaa eagtaatgie taeattgaga aaattgeeaa gtaaattaga	120 180 240 300 360 420 480
tacacetaaa tattaatate tagaaattat aaarateace agaggaratt aacatatate aatttetagt taagagteae aaggeettte titteeaega geaaatteat titgeaceat taegataaae ataacaatet cateaggaet tetteeataeg tetteeettt eteateeaet gitaeggite ataaagsasa aagacattig aacaaagsag cetgiggeig gaactgeagt titteeetti ggeaaagaaa getaetgaee etggicaeee cataceetaa agtgaetgie agaatacaga tageteeeta accatgetet eetactetag ggacaatget gaggggteil agaaagaagti titataceetg accaatgate teoocetteta gagteaatee titeaagaaet agacagaatt aaaacaaaga teaateatte aagettaeta tagetigate tittiteage teagataaaa teagaaacaa cagtaatgie tacattgaga aaattgeeaa gtaaattaga atateeaatt attgaaaaa taagatetgat	120 180 240 300 360 420 480 540
tacacctaaa tattaatato tagaaattat aaaratcaco agaggaratt aacatatato aattictagt taagagteac aagggoottto tittocacga gcaaattcat tittgoaccat tacgataaac ataacaatot catcaggaot tottoccott otcatocact gttacggotto ataaagcaca aagacattte aacaaagcag cotgtggott gaactgcagt titticotti ggcaaagaaa gctactgaco otggtcacco cataccctaa agtgactgic agaatacaga tagotcocta accatgotot cotactctag ggacaatgot gaggggtott agaaagaagtt totaccott accaatgat toccottota gagtcaatco ticaaagaact agacagaatt aaaacaaaga toaatcatto aagottacta tagottgato tittitoago toagataaaa toagaaacaa cagtaatgic tacattgaga aaattgocaa gtaaattaga atatotaatt attgaatata caggtaaago totocctggo toactticta agggototga attggtotot gacttacta gactaattg	240 240 360 460 480 540 560 560

r mitologick i gygat gragg i mydama na atatyst gra ittagggama i gotttt mit	• .
o mitaaningg aasotagast atattattto tijagaa gga batorgaatg atabatatba	34.5
taansagtaa thassigtas tintgiatigg hatatggmaa tittgaggtg aimaaastga	112
aga jagitan agotta min signotitig gitagatata laaatgi data iti daatoot	115.
guggaagass i maggagta sigatutigg sigagtaast sagaasttag gagatatigt	1140
griggaaaig angtarigia gggariguti ganiggggaa gagaatatgg aaaggggtti	1200
oogosaasaa osaggagtasa aattominog tgosgqttig aagggagsia ottullilio	1261
agagonggga gatonaagga aagtgggtoa agoottaoo	1299
<210> 14 <211> 2005 <212> DNA <213> Homo sapien	
<pre><400> 14 gggtatggag trotgoodtg aaggdagaad tgggdagatt stotggadto doastgaagg</pre>	60
ggagggccca ggottgggga agaagggtto caggggtcac atoottacat tcacattcat	120
tgoottotto maatotoagy agacacagaa agtygotggg acgacactgo tgtggtcaat	180
garntetoat cracatoate gggeantgaa teaggteete agteteetet gacaccagat	240
ggtaaaogga atoocaaggg cattaagaag tootgaggaa aaatoogaag aastoagtoa	3 0 0
ggaaatttot acastgasas getggggatg geagagette gaegaggtgg geteegggea	360
accgeaggge caggactete taggaceagg gaetteaagg gaeagaaaag gtaaggettg	420
acceaettte etttgatete eetgetetga aaaagaagta tetecettea aacetgeacg	460
ggtgaatott tactootgtg ttttgoggaa accoetttoc atattotott coccagtcaa	540
gragitorota cagiacgica titocagoar aataicidel aagileigag itacicagor	600
aagatoagta otootggagg tottocacag qattggaata tgacattita tatotaacca	660
aaaggmaaaa agtaagetgt aaetetotte agtttagtea ooteaagatt goodtatavo	720
aatgoagagt abaggtaatt estggttatg atatgtatsa ticagatgto ogttotbaga	780
astestatag totaggitor astisaggas gassagestt tocctssamp estestatig	340
tttgcagaco tgcatoccot dtggaaggga gtottagott attttgcaca tggatatgat	211
actgractic octggettge casacaggit tetagicita coaggicete cicgignatg	960
agassiggga coutticcaga tichattiatt offogalgag talcoccaga ofocaggaag	1020
rtigaaaaga aasatgagaa tgigtagano attagotitt agaggotaga gaatotaagg	1080

```
aras agridia lags aagri lag laga chaatis malagag chomina lgabagsgagar dagggaaalago.
                                                                      1141
tina nitura tari waatka tragatatto haattoaitti gigoaattitoi tiaatgtaga
cuttaungth gittongatt taiolgagh, gasasaaaat caagotalag taagotigaa
                                                                      1200
ogatogator otigoticam torggonago i mogalagga togarcotag alagaggaato
                                                                      1310
attigggriag ggtatuaaaa ottoortaag apurotuago attigtoopta gagtaggaga
                                                                      1380
gratggttag ggagstatet gtattetgar agtsacttta gggtatgggg tgassagggt
                                                                      1440
cagtagottt otttgocaaa ggaaaaaan gcagttocag coanaggotg otttgttcaa
                                                                      1560
atgtottigt gotttatgaa oogtaacagt ggatgagaaa gggaagacgt atgaagaagt
                                                                      1620
estgatgaga tigitatgit tategtaatg gigeaaaatg aattigeteg iggaaaagaa
aggeettgig actettaact agaaattgat ataigtiaat giceteiggi gatattiata
                                                                      1680
                                                                      1740
atttstagat attaatattt aggigtagot ttaaaaastgt tgttgotagt attstttagg
aaaagtasti tgatacigaa ageeteeage sesaasstit tittigiteaa taaaacaatt
                                                                      1800
gattettet taaatatgat attegataad attgegtagg cadtetetet cagattatgg
                                                                      1860
atgaacacat titattiiot tiottotooc aggiaaagti tiacagagii acattocagi
                                                                      1920
                                                                      1980
cappactget ggacagagig ogsetatian acceacated tigicageat igaqtagita
aattitiott totoaaagit toota
                                                                      2005
<210> 15
k2115 667
<212> DNA
<213> Homo sapien
<400> 15
                                                                        60
casatattta tototggato gagaaggagg aagggotttg gaaccocagt otggotcagc
congenings aggagggga ggaggaaggg gcagggggag ggigcagcoc oigagaggac
                                                                       120
                                                                       180
aggaasaggg stgggagtha tgsaaasssg qgttsaaatt ssagstsigs sassasssag
ggoagggtoc tratgerest gigretetgi giertereng gaaamaiggi estaagasea
                                                                       240
                                                                       300
crotigacito toagogicada tigaagigttisa igtigrotigigaa baggigtaggia gticoagistat
                                                                       360
ggoogootot atgoraggoa otgggoaago giltgigato otgcagggaa gaaggoaakka
                                                                       4.00
ggtagcaggt atttotatta gagaaaaaaa aggogtgcag ggagaaggtc tcacggggta
acotacagag otergaggag otggoagoan oggggaatgg garattoago acacotootq
                                                                       480
cagagggtos astaustogs trastatgor coogsogsot agacgoscag cagogototo
                                                                       540
```

staggitticas aggectasti accetaaggg aaaaatgget gggeegeeas atggggaaca.

```
ggatgbaaaa bibagaabib aaantoaqag barbbibtin bibunhibty agabgagibt
              2001203
             <2103 16
             52712 618
             92125 Dig
                                                                                   \vec{\gamma} \in \gamma
            (213) Homo sapiem
            <4005 16
           ggstststag attaacataa gatatttegs tgstststst tesgagasga gaaccattag
           taagaattga aacgtiitaa aatgtigait tiittiothi gaqgactaaa cagaatggta
          gcaaggatea aatumgugaa meemgggmaa agtmaactme tagmaatett ggtmattttg
                                                                                 50
          accagaaggg tagaagtgaa agtgatgaaa tgtggaaagt totggaagcc ttttgaaagt
                                                                                120
         aaagotgaaa gtattigotg tiacattiaa ottgagtgag gtgaagacag tgttacagga
                                                                               180
         tatatocaea tittotgaco igaacaacta aaggiotgaa titootgagg igaagaatae
                                                                               240
        tattaaataa aagtittagg toatagggaa toaagataot tittiggaca tittaatiit
                                                                              300
        gagatgttga gtgaaaatca aagtagaata ttgaatatgc agtttgatat acactttcaa
                                                                              360
       aatitgagaa ataaattigg gagtaaacat ggatotttaa agcatgtgac aaaatgatas
                                                                             420
      tactottgaa gtacaaaaat agattotagt tacataagto titagaatto aggagotaga
                                                                             480
      <sup>ඔ</sup>ඔඔඔඔඔඔඔඔඔ ඔඔහුපුල
                                                                            540
     <210> 17
                                                                            500
     <2115 1108
     <212> ENA
                                                                           615
     <213> Homo sapien
    <2205
   <223> n= a, c, g or t
   <400> 17
  gaattttaad aatgitosag attiattaat itaaadaagtg godattdatg etatgdatat
 tttagggadt gaagdatdaa dagtgaadaa aaaaaddagt otgtgtotto dagadtttad
 atatgaatga gagaaagcat aaagtatgta cacattaaan aaattatatt teaaaaagte
                                                                        50
 atgaattota cagagaaaaa ogaaaccaag taagtggtac agggcaggtg gatgagtgtg
                                                                       120
gggaganga graggratet votetootag oudtotgtga taataatata tatatanaon
                                                                      180
angartagaa ggaagggagg aacaagtcar atgggtgtat aaggaaaggc actotagaag
                                                                      240
                                                                     300
                                                                    360
```

```
aagamakatu laatgi aasat tokaaaagtoo tigosatoitti atgiibitaka gagagaagaak
                                                                       . . . .
адпідпріступ ўроцарунар пропадзавая ўадзаддава зрудурадзав ардадза с
                                                                        40.
gtaggt ract gwaggtitti tagathaaba taagatatti ogttgttttt totttigaga
                                                                       5.4.1
ngagaarban bagnaagaan ngaaargiit inaaangtig atibitbito bitgaggart
                                                                        600
aaa ragaaty yhäymääjyä tulaastraya gaaalnayyy aaraytaaan täutäyäääh
                                                                        660
                                                                        ctiggiaati tigaccagaa gggcagaagi guaagcgatg aaatgtggaa agtictggaa
                                                                        7 4 0
grafittigaa agtaaagdig aaagtattig cigitacatt taaccigagt gaggigaaga
cagtgttaca ggatatatics anattthilig almigualsaa staaaggtot gaatttostg
                                                                        840
aggigaagaa tartattaaa taaaagtiit aggiratagg gaatcaagat actiittigg
                                                                       900
                                                                       960
abattitaat titgagatgi tgagtgaaaa tcaaagtaga atattgaata tgcagttiga-
tatacactit caaaattiga gaaataaatt tgggagtaaa catggatott taaagcatgt
                                                                      1020
gacaaaatga tactactott gaagtacaaa aatagattot agttacataa gtotttagaa
                                                                       1080
                                                                      1108
ttcaggagct agaaaaaaaa aaaaaggg
<210> 18
:211>
       552
       DNA
:212>
:213> Homo sapien
422235
<221> misc_feature
<222> (454)...(480)
<223: n=a, c, g or t
<400% 18
caggatatta agigatatot aacaaaaato atticoccaaa ticalgitac agiggitoot
                                                                        15 C
ggtttagctg gaattcaggg aacgacasta ggagtgtttt gtaatcagaa gaatccagca
                                                                        123
tragaragur ogarragara ggasattgat tigiragirit taracitasa aasttaatag
                                                                        180
tggagaaaca gtattggatt gtotatgtto aattticacag caatttoottg gcattagtgt.
                                                                       241
laaggaacaca laagotatgtg tacttittggo gittgatatta tittaagotgg tattotaago
                                                                        300
ttaigagoat agaitottusa tighttutog baagnatata bahaittgia tgoobitgia
                                                                        360
gatacatatg taggratata cattaratgt arataaatat gtaggcatat acattarata
                                                                       400
tgratatata aatacatgaa tacatatata tachninnnii noonnoonnii noonnoonnin
                                                                       400
ottittasaaa tigattaatg godaagatgo cactgoaatg cagtgaaggaa tatgatggti
                                                                       540
otgoatocat tg
                                                                       552
```

```
*213* 1 *
KILLA DIA
<21:0 Humi sapien
44000 19
tuta manna gaatuataan taanathiini waaa migaba ataatabbaa gtangbagbi
gragnaartg aantragaaa rattiintggi aggaatacaa attgicacaa taaccitigga
                                                                       120
ababtigtata guagtatott ubaaasottaa abattabagg gatobaatga totagbabtt
                                                                       180
odachocaga tgcatacaca agtacatatg ttcantgaaa gtwaagtgwu agaawgttha
                                                                       240
                                                                       300
haagagiraa aastagaagi aacarataty titalinaasa giagagatga taaaatatat
                                                                       3 0 7
ttggata
<210% 20
<211>
<212 > DNA
<213> Homo sapien
:4005 20
                                                                        € €
gggaraagaa agastaagaa aatggstgtig tgstgttgtt tsagttttiga atattgtoto
attgotttot aataatttag otottgitaa tatcaabaaa gtaaataaat bataatgtit
                                                                       120
                                                                       180
tggottgaac ocaaagtago tttcaaatgt attaAtatac outaaggaaa tatacaatgt
aagtggtaac caacaaatgg gtottcatat tgttgttgot ttggaatoot tagaggtaaa
                                                                       240
augtattita toogbottitt aaalgatgaa olaaalaott tioaaatatt ggettoatag
                                                                       300
agtigtaataa ocatatigaaa atocaaatta acataatatig tiotoocaig aaataaactig
                                                                       360
tadaatgtgg acttaacgtg gcagggtggg ccacttgcaa acatgaccta agcaatgaga
                                                                       420
aattgaatto aggaaattta giittioitti oitiitoiot tiilotoiotg oottiitggg
                                                                       480
acaactticc attgagggag ataaaatatt caggaaaaaa tactctaagg agtcaaagaa
                                                                       540
attigittaa atgagtaaca tiaatottig tytigagasi gaattittysi yataalaato
                                                                       600
⁺.⊒
                                                                       602
.210> 21
<2115 934
<2125 DNA
<213 > Homo sapien
44005 01
gggacaagaa agantaagaa aatggotgtg tgotgttgtt toagtittiga atattgtoto
attgetitet aataatttag eteitgitaa talcaacaaa giaaataaat cataatgitt
                                                                       120
```

```
r gantralaur ibis sagrago itotica saratio istriastatain ibir saggasa itista rastigri
                                                                      1.2
eagriggs aan Dealeadas ggogs in in hat an hight git gintont gdaat hin it dgaggmaa a
leagrathtta torgtotttt waalgatgaa utaaalaobt tipaaahatt ggottoatag
agrighashaa crahatgaaa abccaaatta acabaatatg bbcbcbcccag aaabaaactg
naraanytyy artthaoyty yragyytyyy roadttycaa aratyacdta agoaatyaga
                                                                      421
480
                                                                      340
acaartttoo attgagggag ataaaatatt raggaaaaaa tactotaagg agtoaaaaga
aatttgiitta aatgagiaaa carraaatri itgigiigag aatgaattii goatgataaa
                                                                      600
aatotgottt stgggttgga ggaacggtgc gttgcactgc totcatggga caattgtgta
                                                                      550
                                                                      720
atattttggc acgaaaatgg gitatcagac accaaagaat tgtgtacotc agaaaagcca
aagtaacaat tggtttgagg tgaaaggaaa atctaagtga tgaaattcag agtctggaag
                                                                      780
agaatatgtt ggtgtttgat tgggtgtagt gggaagaatt totttgoota ggagtactto
                                                                      840
antiationada tiggitigitigi atatigittica torraddata ottittaagit ggaatgilgoa
                                                                      900
                                                                      994
tgcaattcaa gtttatcttc ttgaaatctg gtaa
<210> 22
      568
<211>
<211> DNA
<213 > Homo sabien
<4005 22
                                                                       60
tgatiottigtt actiotititag cictaagagg tgaacattat agoottitigg gaataaggta
cactgodian atticagingt graatities associated stategoding cootsassatt
                                                                       120
                                                                      180
ttaatatatg tootaaaggg caaatgtagu ataaaccaga ttatggtact ttggcacaag
cttttcactc acgagetgaa tgctaactaa gttacaaact taattttgct ttttcatatt
                                                                      240
tititgaacti gittitggood Gatgaaatgo titigatatoi ggaattitioi teractgitti
                                                                      300
cattinging igaatragto tgaatttaga tiroattatgi ggalatatatga gaadgioago
                                                                      360
aatggtotot titagaaagg cotgaattog tygaacaaay aattaggota tyccotgatg
                                                                      420
                                                                      4.50
gigatitlett ibriatagaat ilintitatai ligggentgag ligagettiag aagigaagas
stiggagagta titinagattig fototagisti cagtigtatio aragisastag tigaattigtita
                                                                      540
ctotaatooo gaaccagoag gatcagoa
                                                                      800
```

<2105 23

k2115 969

<212> DNA

```
willer Home Hapten
- 4.
<:<u>_</u>1, 1 +
      midzjiesture
** 2 L L L
k(223) m= a_{ij} m, a_{ij} in b_{ij}
7400 - 23
t jaturiugit – esturitutag ostutuagagg tigaabattat lagrostitigg gaataaggsta
                                                                   120
varioushas atticaging ghaattitas agassistes atatggettig coctaadatt
tidatatatg testadaggg manatgiags aladaesaga tidiggiaet linggodsaag
                                                                  180
ctittcastc argagetgaa tgotaactaa gttacaaact taattttget tttteatatt
                                                                  240
                                                                  300
titigaacti gittiggeed caigaaatgo titigatatet ggaatititet todactgitt
cattingctg tgaatcagto tgaatttaga topattatgt ggatatatga gaangtnagn
                                                                  360
                                                                  420
aatgetetet titagaaagg cetgaatteg tggaacaaag aattaggeta tgeoctgatg
gtgatttott totalagaat tootttalat tgggoolgag tgagottlag aagtgaagad
                                                                  480
otggagagta titicagattg tototagott bagigtatou acagbactag tgaattgita
                                                                  540
ototaatoro gaarcagoag gatcaqoato octgaqagtt tgtcagaaat gcaaattoto
                                                                  500
                                                                  6 đ C
723
reacgatigt gittactggt ggoodfraaa roatagetta ggaatetaag aacticaaga
                                                                  780
aaattttgag oottaatott taaagcagtt attgaatotg tgggtcaaac gagaaaagga
                                                                  840
gtactigada cottagagitg ogiliticadi igagaagada cactiliggaa acacetator
                                                                  900
aacagactas aaatataggs tattaaatta aaaatotggt tisaaaataa tasssastta
                                                                  960
                                                                   959
ggttggtaa
<210> 24
<2115
      870
      DNA
<2112>
<213: Homo sapien
<400:04
cargaagota ayrittivaar tivacaaabto tiggigataa lagaactaaa ggatyttott
                                                                   60
cagtaaagag aaaaataaat googaaagaa gtiggaatant laaagraaaga gtigttaaaat
                                                                  122
atgagotada gotiaataigo tiloaaaagot agaactadat ottagodata ataatatggi
                                                                  180
attadagatg taaatqtgtg stadagtoot tgttttgagt agaaaagata sagatgaatg
                                                                  240
btatagastt btaaaasata tatatitaaa taagtatgit aaatataagg giatssagta
                                                                  300
```

```
t agt alt agel läät at agaka it kitaamin kiin kägt tittikkii 1704 gt Aggiga kaaggigä kää
gar aggraat (attriaaan), otroopartoo attobataga (gggraggkaa) gaagataaab
                                                                          42.0
agalagusaag yaaalabaty gaalabaggaa staradaata aaatoogtoo geogticobab
                                                                          450
tarlaaattaa mimakaaagin bagagagata gibaagattat boottobatat googtittoa
                                                                          540
                                                                          600
aagtaacait gaaagataaa asaatacaag tataagacag gasaaatttt otottggtta
prayraagtig aaagriggra gratigaarat rattitgaaar atgaacatgi tittigottaa
                                                                          €60
                                                                          720
uaacagcaaa tgacagaaat statgtotcu (Etursas)a aggaacuato batgaagatg
                                                                          7380
atataaaatg actobagata bigaaaatat actobbaaaa tatataaaaac aaaacegaca
gaattatcaa gaaatagoat atccacagto agtgttgcag attttaacac acctctctta
                                                                          840
gaaaccagta tatcaaaaaa aaaaaaaagg
                                                                          870
<210> 25
<211>
      3795
<212> DNA
<213 - Homo sapien
<220×
42215
       {\tt miss\_ieature}
       (3362 ... + 3362)
n= a, c, g or t
<2222×
<2235
44005 25
contititit titiittgata tautggitto taagagaggi gigttaaaat oigoaacaci
                                                                          -60
gartgtggat atgreatte tigataatte tgteggettt gittiatata tittgagagi
atattttcag tatctagagt cattttatat catcttcatg gattgttcct tatttataag
                                                                          180
tgagacatat atttotgtca tttgotgttt ttaagcaaaa acatgttcat gtttoaaatg
                                                                          240
atgiticatgo igocagotti caciliggigg taaccaagag aaaattitito cigititiata
                                                                          300
                                                                          360
ottgtattit ittatottto agigttacii igaaaacago ataiggaagg ataatotgac
tatotototg gottigtaga tidattitata tidatgantao tidopataitti tattitigtat
                                                                         420
                                                                         480
ttoctatibo patgibitto ofbigorbot hittabotto bilicolgoco bolattgaab
ggagtgaaag vatttaaaat attavotato tittototit voostastga ttaaggastt
                                                                         540
gtabottota titoriatati totattabia tabiggatab bottatatti aabatabita
                                                                         600
titaaatata tatiittitaa aagiistataa saliisaliitg tatiittitti astisaadasa
                                                                         660
                                                                          720
aggastitag casasattia satistitaat assatattat taitigotaag attitagitist
agottittgaa goatattago tittagotoat atiittaacao tottigottit agtattocao
                                                                          780
```

gr	4*****	m inthamig	ва ўва лабіті	titagittit	11 31 / 32 / 33	-41
gagtitrigtiga	yuu qaaaa uu	magini igha	tanotyasya	igigittati	ttgataataa	300
tinguatata	aanda mgta	tgaaaotgga	aşıt sasaşt	ratititita	dagdadtitig	<i>3</i> 6 0
aagatantag	toagtittoi	ggtatintain	gttgrossag	untantgoda	atttgastas	1020
natt pratta	nn ragaatinn	titottiatan	nogoach dag	aatttragat	ittotottta	1080
trattaatit	ostasgatti	tattatbatg	tatgtagttg	tggatttato	tatestgtgt	1145
tacatatggo	agratuitoi	attttgaaga	otoagottoa	tricigadaa	aattottags	1200
tgcagthatt	quiattaita	itgraattt	tttattratt		ctttgcaact	1260
cotagoagat	gtatgttaga	gettetsagg	teatetttea	tgtccatctt	tototttcat	1320
tttottotaa	ctctctctaa	actgcattct	gaaagatttt	ctcagttcta	titectaatt	1380
ctgtaatttt	ctittaagit	atagaaagta	tgtgcagtct	aactgttctt	ttacticaat	1440
attgtattta	taatatttt	cacttcaaga	tgtotaaacg	sttatttata	acagotttot	1500
ettettgttt	cattatotgt	tottoattot	gtaaaatota	acticiticig	tacatatatt	1560
gagaatttta	acttattttt	aaactotoac	cagattgitc	ttattttata	aggtataaat	1620
tototoattt	gttgggttet	cttgactgct	ttttcatgat	cttaggtttt	actgggttct	1680
tigtaatgit	ttgggggete	aattittatg	ataactaaaa	aatgtaagta	cotgtatota	1740
tagggeagtt	itaagttgoo	teagettaaa	tatgataatg	tgocaacett	gaaccagacc	1800
ttaagttggt.	agatotäggt	300000000000000000000000000000000000000	cataggtaga	ccagttctga	atttttagsc	1860
caaaagtatt	ttgggtccaa	gtactatess	gagtggtttc	atgagattga	ttgtgactgc	1920
caattottot	ttacttotgg	tcaggaacaa	goagottatt	ootggatgtg	acactgetgg	1980
gataagttag	attagoccag	ataatattg	tattgtgoto	tigggtestg	ggttcatgca	2040
cagacaggat	cattgcaaaa	aaacctggtc	ccaattgccc	atatocatto	atagracccc	2100
cogatococt	godaticatag	tggattttat	attactggcc	cadagagast	tttatttatt	2160
atttttaaga	ataactatgt	attttttaaa	acctttaaaa	atatttatgo	ataatttoto	2223
tgtttttgaa	tgagaggaat	aagattoagg	agtattbabt	otgooaccot	gasstagaag	2280
toccagagta	gettteastt	ttgaaataac	agragttsaa	ttttootgat	otpaceagto	2340
tgtaaasatt	agcatatata	straaagtts	aaasttgaat	aagstgtagt	agagacaaat	2400
ttopattatt	tggaatttgt	ttarattgaa	ataaataata	gatgtastag	gaaatcagaa	2460
atggaaggaa	gatgasttta	aaagggttaa	gaaasttggg	acagcagcag	actttactgt	2520

aaatiintat g	tadaaantor	a romaint gusto	mpatasat d	gaar ragairt	gaş haküğüü	gan Baran saran sa
ga gygt amt t	t charagran	រាធ់ប្រធានទៀតទូ ។	ractigospor	agsagastrs	tg: wat aagt	1440
арраагліўг	antinity (a.)	nt ggalagana	godatragot	tagtggaaag	aatgotygao	2000
igggaatina	gaaatgitoi	agitratitt	it appaint aa	gtrattgtar	agottaggot	
aagooaggoo	n nitiggg	mmaggmit	tocatorgra	aaataagaga	gttgggstag	2823
aaraastts.	aatgtapott	rragaaataa	tinist giga	cottaacagt	tuggtasiii	2880
ataagtagge	tgagtostos	attottoago	ttgeteagaa	ataatotgoo	aggtaaaaaa	2940
agaaaataat	gigitterga	adtragttt.	Paŭatuddat	gaaagaat ca	scagatgcat	3000
atttttgttt	gatoaccast	otapaaagga	atagootggt	agetggatga	agtttctgtg	3060
tgggtgtaca	cacaatotaa	gttttaaata	gaaaaagcaa	accaacccag	accaaaacaa	3120
aaaccctcca	cacaagtocc	agacgcaaca	aatggtaaga	gttatttat	acaaacatgt	3180
cigitictaa	tagetgagaa	gaccaaaaaa	gaaaaaaatg	tatcaaactg	ccaagatata	3240
tgtgtagata	аадзааааас	taaggagcat	gcagcaaagt	tacaggatat	gagagatttg	3300
actotgoaca	otgcaaagtc	tgtacaatta	gaaatttcut	gtgaacagaa	atgtagggaa	3360
gncaatgaga	aaagaaagaa	taaaattqga	gttc:actaa	atggaagtta	agagtggatt	3420
aataattttt	aaattgaggc	caggcacagt	ggttcacgno	tgtaatccca	goodcatgto	3480
attactataa	aacagatagg	rattatattt	gaatttttaJ	cttittca:t	toatottoaa	3540
atguertete	caaatactta	tatiotootga	tgagtttatt	gaagacctaa	ааааааааса	3600
accattaaat	attaggtcau	ccaaaaaagac	aragaagtag	gtaatagaaa	ctcactataa	3660
tgacaccata	gatotataat	aataaaagtg	tatagttaaa	paggot papa	otglaatata	3720
agaactataa	gcatttcaaa	gatgetatea	tgacctaggg	gaacaaatat	gatcasaatg	37180
tacacgtaag	ataag					3795
<pre><210 > 26 <011 > 618 <010 > BNA <013 > Hem. <400 > 26</pre>	o sapien					
	agaggsattt	aagagsaaat	Saargagatt	tggagattaa	titttgtaga	60
aggtgaggga	aaaggaggca	tsaaggttga	torraagtgt	gtgggttagg	raaaaggatg	123
aataatagat	ggatgotaco		ocacgoagaa	ataaagggaa	aggagaggg:	180

stgggtgggt ggatsagsag gsagasaggt qagtgtgagg ggasaatsag gagggaggts 240

₩ 1	
purpost guarant bagas angs. Pagnova sit naggot tiphaan baat tiga sit bit gaars bot a	:
gaar stigtigt is sagmatuit on gargotighn, ggmis sabbua, aaagtiggsaa, ababbustigs	3 € I
anarthynon obywarzote awattwaaty tracottoth agadagatot todowszanow	421
detaagetet totestaden paraetgati dessassatt gractistics alottesse	460
anag magta niatgtings taatitatat tidestgitt gottistigt tiottatoig	540
autopolaut agtiattisag hastgtaagg tisaggggttg tatgttgtto obabtobaga	6 C C
totapapagt gapagtpa	818
<pre>k D10 %</pre>	
<pre><400> 27 ggtaccatgt atcoccacca tocaggacca gccagatgac atcagggtgc ggagaggcag</pre>	60
ttaggootoo ootoattgta tagoagagto ttgttttaat gaaaaagtoo cactttotto	120
ocogactgaa actocottaa gtocatataa gtoactgtgg atggagaggt actgttacog	180
tagetgtgtg tgtactgaag gggcacetet acaacegaca gtggccagaa gtgagaaaat	243
aaaatggaga qtagtotaga adcatgtgoo toatocaaco cactoogoot gaaaaaaan.	3 0 0
toottoottt otoaagagad acctgggege etttteatte tooctaccac gtggecaaat	360
gotoacaact aatgottaag ttötgaagtt tacocaggta gagacggaat cattgatgac	420
atttatgtgt toactcaaaa caaabgaacg g	451
4210> 28 4211> 573 4012> DNA 4013> Homo sapien	
ggaactgoot ottototgot ggacagagto taccaggoto cototgocot gocotgocat	60
agggtggaca tgtgacocao stagocagta agattgtoca otoctotaat toatgggcag	120
aaggaraagg aragtoagag totroorgget grotrootger argraftert grtoorraar	183
popaatotat gogottgovo ttopogoptt tiggopotoa ggagotgipt iggitopigo	243
pottigeorag gestgittitt esageettus baccaattit etgageteet gigggigige	300
ctatottgtg tgggtttggt tttggottft aaatgagcaa aggcagaatg agggtgocat	360
gagsabagat gaggottttg ggaaabgsus boottosatt gbabtgttgg aagggagtgt	420
agaggotgot gugittootg gggooggosa oottgacado gigootgoat gcaogoagod	480

in regnary of the first	n aganaan ma	33, 413344.	n magnowyn	ការៈផ្លាល់មន្ត្រូង	1, 4
ggsaatginsa godonogti	t otttaggrot	ma ĝ			: **
02119 29 02119 643 02129 DNA 02139 Homo sapien					
<400x 29 taggadagon ottbabcda	en e	agout agata	asasaabhaa	adcaasddic	-G
tggggotgaa catgootta					
agygolyggga gygagygag	i ortgaagagg	otigoaatti	postygtgsa	pagedddaet	18
geaggeeett eaggaaaeg	t sootggagge	tgtgagettg	goddadddda	goodatotoa	24
goodcotcag ctgccggoo	a geocagetes	actoscagtt	oggtgccaag	cetttecage	3.0
oogotecago ecaegoago	t stateteats	tgaactctca	catacccata	attacaactg	3.6
accatatttt ccaaagcag	a aatcaagaaa	ocastaaata	aaggatttet	gggotactic	42
tgagtgtcag aggcagoct	g ggaggtgaag	tttggatgca	gaggtattca	aatststgag	48
acaugtigat agittititg	u gatgastast	atatotatoa	tattttatta	ataagtcaaa	54.
gocatoutag gaaatgtgt:	g tigggcacat	godadodata	ccastgitaa	ctgttgacgt	60.
ggacacttta gootggcag	t tootagotgt	gtggcctggg	caa		64.
<210> 30 <211> 761 <212> DNA <213> Homo sapien					
<400> 30					
occigocaca cicagagga	o ocaaaagagg	cctcagtggg	gatotgggta	gaataaaaga	ė i
ggcagtagca caccaagtc	a ccaacatggo	sssagasatt	ccacacccit	accetgtaag	
toototttta agaetteet	o taastsatga	ttgatataa	agadagadad	acggccacca	18
gotgoanton tatitionag	o casticagotg	gotttgcaag	sotgocagga	gcacagatat	24
ggtrotocot tattotgtr.	a ctaagotgto	attgtagaat	tgggacacca	gotgootaga	3.0
aggicagacaa tgaatggag	g chaagcantg	totgtgatgg	ggacactgtg	stgggggsag	36.
gunocaccut gggacaago	а авдасаддса	gaatataago	tagagatagg	cagagttttc	12
aatggagasa scaggggas	a gastgggt <i>s</i> t	gtaagggaca	ggagggaags	aaggactgtt	4.6
gaagcaagga cggttggtt	a datatataaa	stgsasagta	ttocactcac	tecetgtaac	54

ាងខ្លួនខ្លួនក្នុង ខេត្តកម្មកម្មនាន់ បានអ្នកនេះបាល និងមាននេះអង្គមិន ប្រទះបានស្ថាប់ បាលប្រទះបានស	<i>:</i> :
aminoggtaga anagnadina gaadagdggm inkdagono bagdaggona dagodangti	-1.4
n changadan ggiraaygira giraanatuhn aggir ragir agabaggbirib giggiragira c	** *
rat gurugga gagagarnga gagaagaatg tigganagag a	77.1
- 0110	
<213> Homo sapien	
<400> 31	6 C
racatotoag gitticagaga gayggagaac tititoatgic agagoogagg aggitgoact	
gantigggaa tegesagtiga teganagggat totegentite aaatenatio tottagagat	120
graatggtto agtaacaagg gastotagga tgatcaaagg agattigagt gaagggaaac	180
cattocatto agiggaatoo tocatolgao olocattaca cagalggacg aaagigagio	240
toacagagaa ootagoactt goocaaagtt atagactgaa toagaagcaa tgotgagact	300
aaaaccaagt otoccaacto claaccatgg gatggatggg agaggcaccc cgagtotgat	360
gtttotgotg gggtgatoot ocaooccaot gattlagagg otgtgggagg qtotggggoa	420
gggtgotggg gaagontgos aggntoagnt tgragonsto bagebagage thittootgtg	460
goodbactoa dagaagggos ttacotgota gitagestag coldobacot telggggttg	540
ttatggaaac caaacctgga ggggaaggga ggaagggcag agaggagggt ggcaattoct	600
geagteacta aeggegtiggi etteaceate teaagataag ggaggigeag gaagaagget	660
tractgeagt ggggetggtg atgggatagg atteteaace accaecettt getettletg	720
nandtigtictg stigticeaget gtotgodtot ggneageage titagodatica etgaaggage	780
agastiggett ggaggagggt tilgscags: tgagagggs aaagstotga sssstcasgt	840
gaconcacae tigocacote igoaacigge coigigical accaageati coiccagees	900
tgoracacto agaggacoca aaagaggoot ragtggggat stggggtagaa taaaagaggs	960
agtageacac cangteacea acatggeore agaeatteca caecettace etgtaagtee	1020
totititaaga ottoototaa otoatgatty ototoobaga pagabababg gobabbaget	1081
grasturtak uturagonan tragntggst kigcaagoni gocaggagca cagatatggi	1140
orbroomtat totgloacta agotglocot goracuttgg gabaccagot gortagaagg	÷ 4. C C
ragapaatga atggaggora agpartgtot gtgotgggga pactgtgotg ggggcaggtt	1260
craccotggg acaagcaaag acaggcagaa tataagctag agataggcag agttitcaat	1320

урацаланна ууудаладаг	iggathtata	स्वयुक्ति (स्वयुक्त	्रम्बन्द्र । इ.स्टब्स्	gant gtit gaa	1:=1
grammy regular gations		om organist of	rant tanton	ingtaan ag	1441
a kgaga na ki inging kwa nink	gtatoriagg	Caaggggt ag	ngnigt an	tagidarana	11
ngguagaana goaghiagaa	aaggggnnua	gagoot roag	гаддесьвад	adatgt.ttaa	1861
anggganggn aaggthagua	atatoooaşş	otoagobaga	aagtootgtg	gcagcaccat	1423
gtotggagag agacogagag	aagaatgitg	gacagaga			1656
<210> 32 <211> 627 <210> DNA <213+ Homo sapien					
<400> 32 gtgaagggtd acatdattat	ttoootcaag	gtettttgtg	caaagtaatt	ggcacagggc	60
agotaactat gtggcaggag	acaaggotat	acttogotgt	ctaaatgaga	acaattccca	120
totgadtgat attaatttgt	attttagtca	aggestetge	tgagaaacaa	gaactaaggt	180
agcagcaaaa atctottott	actttacttq	ggtacetgtg	aagtccactt	gggatagtga	240
aggagaaato ogcattooto	t.coot.ggt.ga	gtgtgagacc	cagtgaccac	papaddatot	300
tgatgacaaa tcangcatca	toagaggoot	adotoottot	cogtaatgto	ttggagetaa	360
ouggnotoat ogtgtocoag	atottoagit	cadactictic	occaagtotg	gastgstite	420
tatototota attoacadad	ccagatattt	ttattttgac	адосаасаса	aaccccattg	480
ittgagaaat itgotocaat	taccctgaga	ttcaaatctt	gattcagctg	tgatgctgga	540
ragotaacco aaattigotg	agececaata	tootaattta	gaaaatgaaa	tactaatatt	600
taagataigi ggottiigag	gattatg				627
<pre><210> 33 <211> 1212 <212> DNA <213> Homo sapien</pre>					
k400x 33 tttabgöttő dachaaaggt	tttgggtaga	aagaagatat	ttttgatata	taatatsata	60
gtartataat titaaaarta	gottttoaga	caaatgtgtc	cast daggea	caggtaccgt	123
ggacilicaa agraggagat	gottoacast	acet caat ga	agonacogto	accactactic	150
actoactgaa ragatattha	otgggcatac	astasatast	aggigaritt	staacosagt	24 0
gotacticoaa gtgtggticoa	tggaacagaa	nuagaccatg	gastgtttgt	tactggtctg	300
otacaagata agtacaaaaa	tgaagagtaa	gcatotagaa	acatagcata	aatgacactg	360

```
cration aat o lagoggo ot ha toold do gga inagagtahag labaagooldag igagtogt dalo
aum ant goggi ogagotiauntgi oggungthigt i hvægginavat gomatightigt lottagdistotig
                                                                        . . .
t sagairatgg aagraaggga gogataaaab bahatgtabg tottaggbag atgoottistg
                                                                        ± 4 €
nimaaayatig aggasayyan asgaagyayg qtiroogaain abattigtigaa yggtibabato.
antatittinni tilaaggiinti tigigiaaag taatiggiaa agggcagota actatgtggc
                                                                        560
                                                                        720
aggagaraag gotatactto gotgtotaaa tgagaabaat toocatotga otgatattaa
ttigtattit agipaaggoo toigoigaga aaraagaabi aaggtaquag caaaaaloilo
                                                                         750
ttottaettt achtgggta: btgtgaagte racttgggat agtgaaggag aaatorgoat
                                                                        840
tectificiet ggtgagtgtg agaderagtg accarradae catottgatg acaaatcacg
                                                                        900
caticateaga ggeetaeetie ottotoogta atgtottigga gotaactiggt otoatogtigt.
                                                                        960
                                                                       1020
cocagatott cagticaaac tottocccaa giologacig ciliciatot ciclaatica
capaccoaga tattiticit tigacagoca acabaacco cattgotiga gaaatotgot
                                                                       1080
ccaattaccc tgagattcaa atcttgattc agetgtgatg ctggacaget aacccaaatt
                                                                       1140
                                                                       1200
tgotgagoco caatatoota atttagaaaa tgaaataota atatttaaga taigtggott
ttgaggatta tg
                                                                       12.12
<210» 34
      447
<2115
<212> DNA
<213> Homo sapien
<4005 34
                                                                         60
ggotgtocco cocaaaaaag titatatatatg taatgtataa acataaaaata gigattacog
                                                                         120
laattgototo tagaaaagto ttaagtgtoa aaatottaaa tgocattoto ottgtoooca
dagttotada tititgaaato tattotaagg aaagaagata agigigiaga tatocagaog
                                                                        180
                                                                        240
tgtgtggagg toggggotgo attatttata aaaggagtac ttgttaaaco tgctggcatt
totgcactgt ggcatcotco atgtgtagac aggcagaagt gtgcagtgta agagggaaag
                                                                        300
geggggtetg gageagteee egggeeacte etggttttaa gtacatgggt etetaaggta
                                                                        360
accatcagag gtgaggagar ggggtacact tituttitat acatggtggt attgtagaga
                                                                        420
                                                                        44"
ticititiggi aagogtgiat tactiti
```

<210> 35 <211: 1078

<212.5 DNA

k213> Home sabien

ok4110 €6 Gagan giranda	Min Mala a a a a g	rint an ar ar ar p	tua atugtu atua a	a Salakanin	gtgattaong	5. 1
eangmmi	tagaaaag" :	ndaagtgtna	aaat Cttbaa	tgicattoto	origi adaa.	: :: :
ragitotada	nnnngaaatu	tattutaay	iiigiagatā	a poglaga	tativagang	101
tigtigt ggagg	toggggtigs	attatttata	ммаўўм ў". й Г	ttgttaaacc	tgotggoatt	240
taigaistat	ggoatooloo	atgtgtagan	aggragaagt	gtgcagtgta	agagggaaag	300
gtggggtatg	gagcagtoco	ogggocacti	siggittiaa	gtacatgggt	ctotaagata	3 0 0
accaticagag	gtgaggadas	ggggtavant	tituttitiat	acatggtggt	attgtagaga	420
ttattttggt	aagogtgtat	tactttttta	cagtagtaat	ttgaaaacat	ttagatatot	480
tcattggaaa	gaaaagtast	stttaagtsc	ttggsaagtt	gataaatatg	ctttgcaata	540
gaagaattta	ggggcatttg	tttttstaas	tsasatgtaa	gststtcaag	gtggggactg	600
accctcgggg	tetgageggg	gototgotac	agoscatoct	acaaacagtc	toocaggitt	550
ocatocagaa	gcaggtttgt	acctctcatt	costtgattg	aaaccctggc	atgactttcc	720
tgtattotta	ggatostaag	gtotoagggt	ccctggaagg	catgostgat	actggeatat	780
gtittaccag	cateatatga	tagcacttgc	tgtgtttgtg	gagtttcags	tgacacatga	840
tttactttct	agetetetet	aagtoooott	tgacctiggg	gootttycac	acactgtics	900
cattacttgg	aatggcotoo	otttacottc	ctdttdtdda	gessetsagt	teatgutuat	960
ceteteates	tttgatoccc	tgttaaaastt	agostaatag	stttttsst	cotttotaac	1020
agcateccat	tgtgcaattt	caggaaggag	ctcattgtga	cottagttgt	ttaatgoo	1078
<pre><010> 36 <011> 404 <011> DNA <013> Home <400> 36</pre>	sāplen					
	catgggttac	taagaatcag	gtagacaaga	aatgaaacaa	gaatottaaa	60
ttttgtttt	gacatcaaaa	eteetettea	totaatattt	tacccagaaa	occaatatgt	123
aacaaattga	gaatgaaatg	atttatata	agssagt tga	gaggerraaa	toccoaagaa	160
ttratestst	acccaagtar	rcaaagtass	tatgaatara	tttcaaaaat	papttpaata	240
agacaattaa	atgaatatas	aaact gacat	avagaaaggt	agtgatgtca	tragatataa	300
autgottgoa	gaaaggcagt.	tocattaaat	tracartara	gttcaaagag	ttaattggta	360
agottatgaa	cagacticatio	tgaaattcaa	tgtttgaagg	atogactggg	tgcagtggct	423

TA TA	424
<pre>% L11 x 37</pre>	
<pre></pre>	
+401+ 3m	
igtgroningg groninggroa on datalingg gronilagaat attiatitot inaaacatin	6.0
tapagagttt gautotttot tgttgapabt agleagettg agabgtgead ttatttabtg	120
graatottaa agotsaaaat accaggatot aadasaaagg tagolaanan tgaatsasaa	180
toaaastgas tirataatta aigstitääi säggaaagis toagsatatt oottaagata	240
otoaagoact caegtoaaga aaatttotot aaataaacce tgtaaagttt gocattgtto	300
ctagocacat tittoiggig titotaatag atcattigti ctagaaaaca citagaatoi	360
gaaacccaaa ggttgagcat gtagacttca tgaaagccca atcccctaaa acctgaaatg	420
cocaggaatt tictcaatti gagtaaaaag atttactgtt caagttatgt aaaaccaaat	480
cotgligaati tgasttitga aagaattasa gtsasasags aaaattsast ttaagatgsa	540
atgeaaceca caecatgaat etgttaatte tgtetttgte aaactaceca aaaaateaat	600
tigrotttot igitatigoa ggaaatagag gittatgoot cattaatoag aagggqagoa	660
gtitaggago agitatitas taagooditt aagitatast agadagadda tittaaaaato	720
acagtateat titagaaaaa taragteesa atagcaagti tagggtacca ateattiaaa	780
atgtaataga gatgagtaca catagacaca etcacaacet taacaetgag ettgaggaaa	840
gtataaagot tgotoatttt	860
-k210% - 38 -k811% - 202	
<pre></pre>	
<213> Homo sapien	
<400> 28	
rattttgact gtotttarag aaaaagitta tigaroogig gigtagataa gaaaloatig	6 C
tgaootgagt gagaatatta gtoaatgtaa otottoaagg taatgaaaag agtaotgago	
tatgatttaa asttaastgs agagaagtot agratattos agttatsags agtgtagsat	180
gataastaaa tiasitgass titsagaats tiagittisi saaltgitaa atgaasatas	240
ngatactati otacticacti cacagictita aa	272

4210» 39 4211» 207

villa v Elma villa v Elma Hapien					
- K4:19 - +2					
កាំ អ្នក្បាល មូល ១៨៨៣១ ខេស្ស	amag sagt at	antgoaragi	gagatooggg	odagot ggaa	F
gggaggggt thgaagaggt	googgagnoa	gatggaacc	ngtiggt glact	ggggaggaar	12.3
tiggatitig gartgaggg	nagooggoan	gt gowat gan	agsagttigg	g saaggaggt.	150
gatgaactga gttgcttttt	gttgaga				207
<210> 40 <211> 134 <210> DNA <213> Homo sapien					
400× 40					
gtgtgageta ceaccactgg	cagttaagaa	ttttaacaat	tigicaatga	aacaagaatc	60
toaattagag totttatata	caatotgtac	tgttggaatt	ttcaaataaa	tattgtaaag	120
aaaattaaca aaac					134
<210> 41 <211> 546 <212> DNA <213> Home sapion <400> 41					
ccaatgaata caaagcagag	atttaagaag	tigaaagaca	gattttacag	ggtgaacaaa	6 C
gttacagtto tgcactagaa	ggaatgaaga	iggaaatoto	ccatctaact	caggagttac	120
atcagogaga tatcactatt	gottocacca	aaggttotto	ctcagacatg	gaaaagogao	180
tcagagcaga gatgcaaaag	gragaagaca	aagcagtaga	gcataaggag	attttggatc	243
agotogagto actoaaatta	gaaaatogto	atotttotga	aatggtgatg	aaatiggaat	300
tgggtttaca tgagagatgg	ggutttassa	igtigtecag	tetggttttg	aacttcggga	360
ttoaagoaat oogooagoot	cagogtocca	aagtigetigga	attacaagtg	tgagotassa	420
nnastggsag ttaagaattt	taacaatttg	tcaatgaaac	aagaatotoa	attagagtot	480
ttatatadaa totgtaotgi	tggaattttr	aaataaatat	tgtaaagaaa	attaaaaaaa	540
333333					546

<2223

<2108 42
<0119 1134
<0129 DNA
<0139 Homo sapien</pre>

```
\times 1019 - mish_feature
3.22.2 ×
> 221> miss feature
william (E3e ... Seb)
\times 2.13 \times \text{ ns a, } \tau_{\text{c}} \equiv 0 \text{ ns } \tau_{\text{c}}
42200
<223> n= a, c, a or t
44002 42
agticatggg offgagggtg tggtaattgt atttaggtod tgtgaaaagg cagaagcoot
                                                                     60
agtasacaac staggettte attgagaace etgagtetag gtgaatcaga aataaaacat
                                                                    120
                                                                    180
aggragigaa gecaaaacto aaataattto agattagtgo ecctageeta gatgtetgee
                                                                    240
tgaagccaga ataaaaatto totttggagg aagatgottt toocagaaac tcaggttato
                                                                    300
actigtagitti ticatigtact atatotigtica gibagtagaa ataatagada datoadatiga
gaagaccaga tatgattaaa aaaaacaata maaaataaac aaattggata tacctacaag
                                                                    360
                                                                    420
agaticagat aatagataat caaatatggt icctaucata actgtgatta atatgtttica
                                                                    480
aggattaaaa gataagattg aaaactitgi cagagaactg aasattgtaa ataagaccaa
atggacctic tggaactgan aaatacaatt actgcagtta aaatctaaat gagtgaannn
                                                                    540
600
aattaatgad taaaaccatt gaatgigtad tiacaatggg igaattitat goigigtaaa
                                                                    550
                                                                    720
tigiacitia aaaattaago titaaaaaaaa ccaaatgaat tggttcaata gagtagatgo
                                                                    780
aattgaggag agagttagtg aaccagaaga taaagcagaa gaaaatatca acaataaagc
attittgaggo tittagatgg aaaataaata toagattgtg aaagacatat taaatatggt
                                                                    840
ggaaaggoot aatatatgtg Laactggagg tiragongga gaggagagag aaagtgggac
                                                                    300
ataasaaata attggaaaaa aatagotgag atagttotaa aactaacaaa toacacaaag
cracagaato cagaagooot agggcaccaa guaggataag tacaaagatt caacatagta
                                                                   1020
aaatttotga taasaaagot aacgagaaca asatagggas aasatggtaa satttataaa.
                                                                   1080
                                                                   1134
agasasagag aaaagotgaa aagoatoatg gttggggagt gggtacotot tato
```

<211 > DNA
<213 > Himi sapien 44 2 4 4 2 abground about image and ingrigory maging aggregational tasks that it means maat paatto totattataa laagiggiama itaitabaaa lagiagtaaat gootattaag attagaaana aastintaatti atalagaaga ghanthaintg a-1-11 <210 = 44 <211> 413 <212> DNA <213> Homo sapien < 2204 <221> misc_feature $\langle 222 \rangle = 220^{-1}...221 \cdot \langle 223 \rangle$ n= a, c, g or t :400a 44 agotraetgo agottomaan toommagetg magementet cocacetemag estatomage 60 agottgggact acaggdagad godaddaggd daggddaatt titigtatiit tigiagagad 120 gaggittings catalityees aggetygtet ogsacioolig ageleaagig alecaaecas 180 stratected caaaagtgotg ggatbatagg cytgacactn ngtgotgggt stoagtaagt 240 acticitiongs ataabtagaa titigitticta atostaataa acasstacsa ossittytäät 300 aatgtaccas tittataata aagaattsat taatagaaat aagrasatti tactgotogo 360 tticagdagda catalactag aaataagdad attttataat atagaagata tat 413 42105 45 :211> 4"3 .212> DNA (213) Homo sapien <400> 45 - 6 € atcaaatgot gagaccaaga tattgogaga tggaagtgat ggtaatggaa aqaacaatga tgaccttgga agagatactg tgaggaatta acaagaggto aaatagaaat aaatcaaagg 12.0 180 gotgacaggt agcactgagg tgagtaagca caaattaaca cagtttcatg gotttotoca. 2.40 grammagetem tragementage rengagarte tigggagtair saggittingm gamentgict 300 atggaatoug titacaatgt officaatoo agthaacoog titoctoota aaatatotti aaaatattot tiotopatgo tatbagtati pagaabtaaa atgotgotan tgatgobaaa 3.50 gcaaagagaa taaactacgg agaaattaac tottoattto cagatacaga aggacotgat 420 473 titgtagaga ccaccaacte aatagtitigg agbaggagti ggcaaactab

```
% 111.8 441
% 111.8 41.6
% 111.8 1NA
₹2.13 × H.Pt.
            -dapiten
+401+ 45
on monthlytig furnither aways regulationers tensioner at getteddotte of sociological
                                                                             • 5
nuatticaet tagiotuado agitoagitt toctinatus giotalitta siggaagada.
                                                                            100
                                                                             130
gaabtgtgtg atgattaaga bootggtatt ggagbbaaab abagbtaaat bbqabttabb
acagnactia chaaghtact tggtchract gagnetbagt tetetaataa aatgaggata
                                                                            240
atatitacot titigiagita tiggiaaggat titaaaagotig atgootigtigo coggigatatig
                                                                            300
gragacacta citacattgo igicatgati ciattgtati actcagiaci ciatciicic
                                                                            360
ottoatadad teodtttgod aataatgada aaaataatda dagottatgt
                                                                            410
<210: 47
<2115 411
<212> DNA
<213 > Homo sapien
:220 >
k 2 2 0 5
<221> misc_feature
4222 \times (333^{\frac{1}{2}}...(333)^{\frac{1}{2}}
(223 \times n=a, c, g or t)
<220s
%221> misc_feature
Q2225 3934...393
:223: n= a, c, g or t
4400> 47
                                                                            60
gtotaaotto agtgoattgo aavabatbag atatggttaa atgtaggagt ttataatgat
actitiaaaga gagaaatota goocctaatt gootgatott otototoggta attattaggg
                                                                            : 2 :
agattaagag toaraagtar aagaagorar agagaaarag goatagtota gaagggcagt
                                                                            180
guationnatig conatagotig tigonotigous aliggocoatt aaalbagoggo balligagabut
                                                                            240
titiootgitg tachnnnnnn hnnnnnnnnn hnnnnngtot toaccagogg ggaagotgca
                                                                            300
grostactic glotgitust adiglightgg aangittaas alatgggatt taatigtggt
                                                                            360
```

intriatiff for a satisfiction of at an again front out fair at a ranting of g 411 -11:> 4-.1112 1122 :212: DNA alls - Homo sapien 222 mist_feature 1222 254 .. 276 1222 213: n- a, r, g or t 4 22 2 s <221> misc_feature K222: 333 ...3331 <223> n=a,c,gort <400> 48 60 gtotaactto agtgcattgc aacacatcag atatggttaa atgtaggagt thataatgat actitiaaaga gagaaatota giooctaati gottgatott otototiggia attattäggg 120 agattaagag teacaagtae aagaageeae agagaaacag geatagteta gaagggeagt 180 gtatoccatg cocatagotg tgocctgood atggoodatt aaacagoggo catgagacot 240 tttootgttg tachnnnnnn nnnnnnnnnn nnnnnngtot toaccagogg ggaagotgca 300 groctactit groupstort actiguating languitado ataugggatt taattiguagt 360 ttiatotoca aattittiaa ttatacagat gogtotigab atacaatggo gitatgioob 420 aataaactca ttgtaggttg tagatattgt aagttgaaaa tgcattcaat acacctaccc 480 tactgaacat catagettag cotagtetas ettaaatgtg ettagaacat tiacattage 540 ctacagnotig gcaaaaagcat ataacacaaa gootattita taataaagtig tigaatagci 500 catglaattt attgaatatg gitclasaag tgaacagcag galggitgca tgggtattca 550 ----aagtatggtt totactgaat goaagtggot ttotoaccaa cataaaatca aaaaaaaaaa aaaaaaaatot oottgtagot atcaggagac ticagtgact taaatgcaag attgaatioc 780 agtigotistic gogototitic talocoligi gi cooplatigi alaactalaa taagtigabab 840 raggaaaatg thatgagagt ataaaaragg gattaaaaat aatttggggg taaaaaggagt 300 gggtostaaa taottoocag ggaagatgac atttatacta ggocatgaat gatgtaagat 360 titaanaggo attratgggg giggggragg rattroaggo ttagggaara ataggagcaa.

1022

<2105 49

зa

```
49
graat satat (toagootgaa gigaaaggai (tgansigini (gitgootgi (tghassoith))
t jagotgatt laggadalota labtttionalo labalyggutab logodytgotg lygadalagod
                                                                       120
buthwhetan it hat hatgi itgethigggg aggudatged aggigtgigtti gatgebeter.
                                                                       180
quoatabolg aatabaacag tgolggotto oggaatlagg ggcaataggo agagadatga
                                                                       240
graggatart tataagaaaga gagaaagcaa aaacoongaag gaagaattat gagagaayawa
                                                                       300
tttaraaaitt gabtgattit toitatabat tilbaaagagt ootgattito agtitttaaa
                                                                       360
addattactt taaaaaaacc aatgeattte aaagttgatt acaaaatgat titaaactee
                                                                       420
tggattttad ddaaattttg tiladitaaa tratagatga tottaatatg dtattatttt
                                                                       480
agaagaacat atoptactot attgtaatgt attatcagtt taaaaaatta ggaaactgoo
                                                                       540
tatttcactt ttttaattta aagcacatat caaagatcat ggcaaaaaag gaggggctca
                                                                       600
ataaatgita goodttoagt tgottoaaaa g
                                                                       631
<210>
       797
<2115
<212> DNA
-213> Homo sapien
<2200×
<221> misc_feature
<222> <569^{+}...<569^{+}
<223> n=a, c, g or t
4400% 50
tgtgtagett ecatgitice igtattaaba atgetaaigg gagaagegat taatttaigt
                                                                        60
aaabtttaca tittitatgea aatgaagotg atatttatta gagotaaaac aattatactg
                                                                       120
                                                                       180
geacttagtg gagtaacett gtgtgertgg gaaatgttag aggagagag ttgatgtter
actaatauch obgebgtaaa daadratgea titatgedac tititagaat tidaaagacaa
                                                                       240
aaagaagago toqqaqagoa tigutggaqa tigottatta gggitgataa ootgaaataa
                                                                       300
ctortgattg geaggegage ottggeetta caattitutt gigaaagaaa gatageetti
                                                                       3.50
                                                                       420
chigatagaa igtaataaac aaaatgataa aaaatgaaat gotaatigoa tiittaaagag
giotittigaa aaaaaattii taatagiigg tigiatigit acigagagaa cigitatgot
                                                                       480
astgactgac tacctagatg attitigeatt astatastas coattacctg cottagtgot
                                                                       540
```

tigiadagia tigiggdaaa alagdiaand diaaaggagt tatadaaaaa gdagaattoo

ataatgaaan agaattttan totonahata aatag	ratigo ottonitutti tattittinia 🧪 660
aganngaaat attatatsas aagtgigili liiti	rrigi atgataguta ringcatggt — nDl
acongonog nocanologi nolyphilin taata	rsagg agaaagaags tistaastti - 760
tutgttgoda tadaugt	297
k210> 51	
k2118 527	
<pre><212> DNA <213> Homo sapien</pre>	
4430. B1	
ygatygagga agggoagttg ogaaagtggt ggaaa	aggag atosagoaga goatggoasa 60
ttotcaggoa aatoagatti tiittioott titaa	agago oottacaaaa gattgatggt 120
etgaacattt atttoottoa caottttoac ataat	ratgt accoettagt tratggaagg 180
oottoaagta titotagggg ocaagtacac ottgt	bagag ogdagaaget acadagteag 240
actaatgaat catctcagaa cattttcctt agact	tiggg tataccicta cagaaatcac 300
nggatgttat taagootttt tagtttttaa atatt	caaa tgatttattt atatgtgtag 360
aattogttic ottaagatti tottotatat ggiot	taaat gateeteata acageeetea 420
naatgaaaca agtgaggtat tgttatccac atric	aaat gastgagatt atgtgatttg - 480
notaaggtoa cacagtatta gagtoaggac tigot	godat ttttott 527
<pre></pre>	
<212> DNA <213> Homo sapien	
400×52	
ggatggagga agggcagttg cgaaagtggt ggaaa	aggag atocagcaga gcatggcaca 60
ntotoaggoa aatoagatti tittittott titaa	agago acatacaaaa gattgatggt 120
ongaasatti arritoottoa pastittoap araat	ratgt acroottagt toatggaagg — 180
orttoaagta tittotagggg obaagtacar offgt	cagag ogcagaaget acaeagtoag 240
actaatgaat catotoagaa cattttoott agast	tggg tatacctota cagaaatcac 300
tggatgttat taagootttt tagtttitaa atatt	icaaa tgatttattt atatgtgtag 360
aattogttto ottaagattt tottotatat tgiot	aaat gateeteata acagooctoa 420
daatgaaara agtgaggtat tgttatocar attto	.aaat gactgagatt atgtgatttg 480
totaaggica cacagiatia gagicaggac tigot	godat bbbbobbbbb bgbaaabbco — 540

intight of the ingle each training of grants a characterists.

```
-2109 E3
.2115 1133
:0123 DNA
<213 - Homo sapien
5220 F
-2215 misu feature
.2225 108 ... 144
<223: n= a, c, g or t</pre>
<22000
-:220i+
<221: misc_feature
<222> (943)..(943)
<223> n= a, c, g or t
+: 2 2 0 .+
%221> misc_feature
-.222: (946)..(946)
\approx 223 \,\mathrm{s} n= a, c, g or t
422201
~221> misc_feature
0.2228 - 0.991^{\frac{1}{4}} \cdot 0.0991^{\frac{1}{4}}
.223> n= a, c, g or t
<400> 53
ttoatgitto tgigtitoca taaactigit ggiottoaco caaggacaaa attaccctag
                                                                         60
ggcaagactt tttgtttatc ttggtaacaa ttaggttttg gttttagnnn nnnnnnnnn
                                                                         120
nnnnnnnnnn nnnnnnnnnn nnnnggataa agaatgtata gototataaa tgaotgttaa
                                                                         180
                                                                         240
aaggatatta tonattgttt agattttgtt titttgttit tiaaggaaaa gitgacaagg
iggtaaaaggg tiatcaaaca agaactitgi catcatatat agbattatat tattiaatig
                                                                         300
acaaccagac aattagotto titttatrag catgatatio cagigtacto aaacccoago
                                                                         3.50
cacagcaact acagtacagg aaagggocat gtaactaatt gagtcactga atttatgtaa
                                                                         420
agotoottag aacabaaba tgtatgttor agbaagbagt abaaaattgg gbaggtgagt
                                                                         480
                                                                         540
catattacaa aaatgggcaa agaagcaata ttaattggcc ctagagaaca tgtaggcott
tgtttagtgd ttgtgadtgg aatadtttad acttttatag ttggggaaaa agdagdaata
                                                                         600
```

```
arrict gora tigala agnost, alt gatt vat liggist taava ittalagaalat ligt tigst tigst.
 in mgtaggg otgattotag tagascaaag gaatggisagt, mgatgagnt aagasacati
                                                                                                                                                                      .. e j
 agagathota bagigbagat gatgabasag aatotititib tottatagab aastigabiit
 eggerbatte baagegatte gepagabete baageacte abotggetet telltooppe
                                                                                                                                                                      540
tthoattiga taccatcaca gattggatgt ggottatagc aatggtagco tagtgtagag
                                                                                                                                                                      900
agagatabat atatatgtag aatuuggaat gobaagitaa gantinaaat giaatuttag
                                                                                                                                                                      960
taaggaagge aatgeteeat taacatttat neeagttgat aattataaag aatattaaga
                                                                                                                                                                    1020
                                                                                                                                                                    1033
acagtatagg gaa
<2105 54
 :211:- 403
 <212: DNA
 <213: Homo sapien</pre>
k400x 54
 igaactootg gttgoodttt totttoatag ttooccagtg ggagoddict atgtgtggta
                                                                                                                                                                        60
aagaractgg ggagtagggt acagttagcc cagaaaaggct titcigaggc agagggaggt
                                                                                                                                                                      120
                                                                                                                                                                      180
ggaacogact agttgggagg ggaatotgta gtoctagaga gtttatgaga actgcccaac
Agrigicationa aagadatgag cadetegoag cootggaato tigggedacat aaattttggrig.
                                                                                                                                                                      240
ggatecagge titiqecasaa agagetegitg gatgeteatt cottgetecae titoetatooc
                                                                                                                                                                      3.0.0
lagogococag agagotytot occoasacos sagyosagyg aagyttacas agittocotat
                                                                                                                                                                      360
                                                                                                                                                                      403
adotogoott gaatgeaagt teestetgig giscageleg age
42105
                5.5
..211:
                360
4212°
                DNA
<213> Homo sapien
-J220>
%221> misc_feature
 :222> .581...2891
<223> n= a, c, g or t
<4009 55
ttattassag agatgasagg tosatttgtg gtagttssot gaagasotts tagtgggnnn
                                                                                                                                                                       60
noncommon commonomo common
                                                                                                                                                                      . . . .
180
nannanan annananan annananan annananan annananan annananan annananan
                                                                                                                                                                      240
```

адавараўза заяватараўз	at datagritis	. s jautúsają	ធំពីធារីគិមិនទី្ទនៃ	Alatiat tititi	: · [
<pre></pre>					
<4000 × 66					
tgtotgatto casagoodat	gettteteea	Abstrassat	gttggctgaa	gagaaggaga	é î
totgagaago ocagagagac	totpacttot	taactaaggg	ggaagaaget	tototgttac	120
tggorocatt toatotgotg	aacocatggt	gtoottacat	gtagggtgcc	catteatece	180
cattigootg gaacagtooc	actotatgto	igteatagig	tcagtatggc	agtattgtta	240
aaat:cc					247
<210: 57 <211: 250 <212: DNA <213: Homo sapien					
k400% 57 godtgtotga ttocaaagco	catgetteet	scaaacttas	catqttggct	gaagagaagg	60
agatotgaga agoscagaga	gaststsast	tottaactaa	gggggaagaa	gattatatat	120
tactogecee atttcatotg	otgaacocat	ggtgtsstta	catgtagggt	geceatteat	180
ccccatttgc ctggaacagt	cccactctat	gtotgtoata	gtgtcagtat	ggcagtattg	240
taaaattoo					250
<pre>k210+ 58 k011> 598 k212+ DNA k213+ Homo sapien</pre>					
<400> 58					- 3
gggotggaga aatcactago	aggdaggagc	octgaggttg	ccgaggggga	coggagecac	50
ttcccaagge gcctacaceg	cccgtagact	gggaaactac	ggtcacaaag	ggtcagegea	120
ttocccaagg toccagages	acargeagea	tggatggaat	ttgaaagtsa	задсададда	183
agsaggsagg tggststtgt	tgaastggst	todagagtet	gigitgggsa	gagagatost	240
tocoogagag tggagtggco	togtgotoac	ctgggttcag	cgtcaaggtt	cacctggaat	300
daddtgdadt ottgtodttg	ассааддсад	ggtggttagc	catgggctga	tagoottgga	360
gagootgatt pagootttgg	gtagagetgg	gtcagtccag	cotoagggoo	atcactcacc	420
rgaagrattg tggtaarrtg	patgadaatg	gagaccccgg	gtgtggggca	gggtgaccgt	4 80

	··i
tuaggyogun tgagaagnaa ggt matagny tootyttott ggaddoogto agtotoda - i	, , è
\$210 + 59	
(400) 89 geootgeotg aaggggegtg tygggtitigea olloageatot glootoocag aattotgece	€ 0
ggotcaccca ggccggggto tongnaggin bollgginatt gcccagaggo otgagtocat	120
gaatggatoo aggadagtgg ggaggotggg cagotocagt gootgottgo otcattgcac :	180
attgttggtd igittaddig gggggdddit igdditagda daigigigad didigigaid - 1	240
ggttagagto etgegggaaa ecagteetag teagggagag tetggggeee ttteeccaca .	300
gggototgtt otoaaagtoo catagetggg tgaccaatgt agatgeaggt eccatgeett	360
goocaggagg cotggetest gggageeeag aaaataseag tgggagatgg gaggtatggt	120
ggggdagddt ggdtagggtg gatatggggd agagataggg aagaggdtot tootggaagg -	:80
catggggcac ottcaggggt ctagggggct aggggacutg aagcctaggc ccaagccaga - E	40
coordaddat graddrada tooddadagg adaldaania igddryggggo rgor - F	594
<210> 60 <211> 2846 <212> DNA <213> Homo sapien	
<400> 60	60
	12.0
	180
	240
ggttagagte etgegggaaa eeagteetag teagggagag tetggggees titoeccaea	3 0 3
ggttagagte etgegggaaa ceagteetag teagggagag tetggggess titococara gggetetgit eteaaagtee satagetggg tgassaatgi agatgeaggi escatgesti i	300 360
ggttagagte etgegggaaa ceagteetag teagggagag tetggggeer titeeceaea gggetetgit eteaaagtee eatagetggg tgassaatgi agatgeaggi ceeatgeett geeraggagg eetggeteet gggagessag aaaatassag tgggagatgg gaggiatggi	300 860 : 20
ggttagagte etgegggaaa ceagteetag teagggagag tetgggges titeeseara gggetetgit eteaaagtee catagetggg tgassaatgi agatgsaggi secatgeett georaaggagg estggeteet gggagssssag aaaatassag tgggagatgg gaggtatggi agaggsaget ggstaggig aagagasagg aagaggstet tsetggaagg	300 360

aggt ggagaa	gggitatgag	gagtiggtigi	tgaatgagat	organgging	gagogaotgg	4.4.1
accasm gg r	agagaagttii	igatagaagg		ngiggootgg	istganggga	4
аддаадосат	ghtgaagiac	ogggaotikog	agaoggooas	artatoggar	at rasagroo	~ ë u
toattogoaa	goaogaggoo	trogagagog	acotgostga	gsastaggas	ogogoggago	840
agat ogoogs	cattgoocag	gagotoaaog	agotggatta	stacgastos	cacaatgtca	900
adadddggtg	ppagaagato	tgtgaccagt	gggaogosst	aggatatatg	adadatagto	960
gcagggaagc	ontggagaaa	aragagaags	agstggagge	catogaccag	stgcasstgg	1020
aatacgobaa	gogogoggoo	rnottbaaara	antggatgga	gagogosatg	gaggaestes	1080
aggacatgtt	catogtocat	accatogagg	agattgaggg	cotgatotoa	geocatgase	1140
agttcaagtc	caccotgoog	gacgcccgat	agggagcgcg	aggocatest	ggccatccat	1200
aaggaggccc	agaggatogo	tgagagcaac	cacatcaago	tgtegggeag	caacccctac	1260
accaccgtca	ccccgcaaat	catcaactcc	aagtgggaga	aggtgcagca	getggtgdea	1320
aaacgggacc	atgecetect	ggaggagcag	agcaagcagc	agtocaacga	geacetgege	1380
egocagtiteg	ccagccagge	caatgttgtg	gggccctgga	tocagaccaa	gatggaggag	1440
atogggogca	totocattga	gatgaacggg	accotggagg	accagctgag	ccacctgaag	1500
cagtatgaac	gcagcatcgt	ggastasaag	cccaacctgg	acctgctgga	gcagcagcac	1560
cageteatee	aggaggccct	catottogac	aacaagcaca	scaastatas	catggagcac	1620
atcogogtgg	gctgggagca	gotgotoaco	accattgess	gcaccatcaa	cgaggtggag	1680
aaccagatcc	tcacccgcga	ogocaagggo	atcagccagg	agcagatgca	ggagttergg	1740
gogtoottoa	accacttoga	caagaagcag	acaggcagca	tggastssga	tgacttcagg	1800
gatatgatta	totocacagg	atacagostg	ggtgaggccg	agttcaaccg	catcatgago	1860
stggtogaco	ocaaccatag	cggcattgtg	accttccaag	cottoatoga	ottoatgtog	1920
cgggagacca	ccgacacgga	cacggctgac	caggtcatcg	cttccttcaa	ggtottagca	1980
ääääacaaga	acttcatcac	agctgaggag	crataaaaaa	agotgocccc	cgaccaggec	2040
gagtactgca	tagadagaat	ggogodatac	cagggccct g	acgccgtgcc	aggtgacata	2100
gactacaagt	pottotocap	ggaattgtat	ggogagagog	acctgtgagg	ococagagas	2160
stgasssaas	adoccogadg	gootocagga	ggggcctggg	cagooccaca	gtoccattoo	2220
tocactotgt	atotatgosa	agcaststst	gcagtoctoc	ggggtgggtg	ggtgggtggg	2280
cagggagggg	ctggggcagg	statatasts	tatatatitg	tgggttggcc	aggaggttss	2340
sssgassagg	ttggggagas	ttggggssag	agattatggt	otggtaaata	tgtatgatgt	2400

```
grigigitti titaarraag gaggqarrag iggabiltora ragoaraath ggiornibar.
                                                                     1441
atgrootggg atgrotowis arandwaggt in httputtt gototgaggt scottowagg.
                                                                     1620
cribocopaat boaggocaaa goordatgig builtigtopag gaabigootig ggocaigoga.
                                                                     2561
ggg...agcag agggogocac caccacetga eggetgggga cocaecoago coctotococ
                                                                     2.646
tototgetod agaeteasti gedattgeda ggagatgged ceaaccaago aacceegott.
                                                                     2760
ting sageaga ggaget gagt inggeaganny gggeeneetg aanggaenea indaawagon.
ggootgotta gtoggotoac ggtotoaaga attgotagaa chaaadaaaa agggacaaga
                                                                     2820
                                                                     2648
дсававасца адводавана асадддде
<2105 61
4211× 572
<2125 DNA
<213> Homo sapien
<400> 61
accordage a atgetegaga coaggette cagestesty detectates catteactes
                                                                       60
                                                                      120
ateategeet geaatgaeag etetgtegga ceaeggeeea tgeaacagea geagaggge
scaaragict aatgaaaagg coocatactt gaagtcagaa aattiggico cagicoigge
                                                                      180
totottgaga attoactatg tggcctggtg tgggacagaa amatotacat aaggacagaa
                                                                      240
statatttu tgaagcaaaa aacagtegag gggetaceat aagatttttt teagcagtte
                                                                      300
Agtitgoaaga gatgitaggo atotootaca actoacacci gicaaagaca tacccaggaa
                                                                      360
gatgiteage gitticaeat traggitgetg aacaaccota tatagetgie tatatetiga
                                                                      420
schartities tgastfeett ggtggttgae ettiggteagt teeggeettg etgasacetg
                                                                      480
gtotocatgg otgggtatat ototaagtta tottgtttoo aggtoagood tgtttootgt
                                                                      540
Madaaataat totttoooot bagtgagbag aa
                                                                      572
42105 62
.211>
      650
R2125
       DNA
4213 × Homo sapien
-C2205
k221> miss feature
42225 S811.. 581
<223> n= a, c, g or t
k4005 62
accotgggta atggtggaga ogaggggtto cagootootg gotootgtoo cattoactgo 60
```

```
at cat ognoti graat gaday of otgf tggw ouwoaxothx figuxadagda guayagggg t
                                                                       - - -
nnaanagtot aatgaaxagg riirratxott gaagtuagaa aattiggtoi ragtoniggo
                                                                       1 = 1
t "tottgage attoachaty tgyootgyty tgygacagaa aaatotabat aaggacagaa
                                                                       1.40
ttintatttin tgaagpaaaa aanagtigag ggginaniat aagatttitt toagpagtti
                                                                       300
agtigradga gatgitaggo atotortada adtoadacot gicaaagada tacccaggaa
                                                                       360
gatgeteage geteteacat traggegetg aacaaccota tatagetgee tatatettga.
                                                                       420
optailthood tgapthooth ggtggttgad bliggtbagt tooggodttg bigababbtg
                                                                       480
gtotocating ringgitatat ototaagita tottigittido aggitoagoo oligitioolig
                                                                       540
taacaaataa ttotttoooc toagtgagoa gaagtaatgg notoatotgg ootgatocag
                                                                       600
                                                                       650
catttgggga gaagccggtg aaagagggca tctaagagat atgtttaatg
<210: 63
<2115
       591
<212 H
       DNA
<213> Homo sapien
k4000 63
acaaggtgag tigggattit aatcatggtt toagtttaan ggcaaaggtt taatcatgtt
                                                                        60
                                                                       120
ttoggittaa agatoatgoo gitoagttag coottigita tgatotaaag gigttigada
gettgaaate caaaaggagg teaactgagg tatggagage tecacatatt gggetaaaag
                                                                       180
coagticacat traggatttt ggaaagttat gtgaaaaatt gatatogtot gttgtaaaaa
                                                                       240
tgaageaatt gecaagettg tecattgite tittgeactg aattaactea otottaataa
                                                                       300
aaggaccgac acagggcctt acacgggtgg totttgtgca gggcccacct gtgtatottg
                                                                       360
storgatiggt tigtotttiggt catagoticaa tigatgotigat taaatigagtt taagtigtiggt
                                                                       420
ggacagigit gcacaaacta ggccattigt gigtottitto totticicit contiguaga
                                                                       480
ttataaatto agootgtatt otaacaaaag attitoatto bagaattiaa ggcagtgiib
                                                                       540
tiototicaaa atgatattgo oticacagatg gtotagggco agocagtgga t
                                                                       591
k2105 64
k2119 542
k212 = DNA
<213> Home sapien
4400> 64
straactage attaacattg gaggtsaatt tiggtattga acataaatgt gagattaaag
ttgaagggoo cagatatoto toagagatga otacaaocao gggagatgto tötgttttgt
                                                                       120
```

tttoccatgo atgtaaatto aagtatotat aaacagcatg ggocaaaagg cagtoatgaa

gaggi islag galissagott ittirkottag listadan go tabadahan sasarttatgo	
garmigagig off.comagga artatizatig attratigings saaaatatig atabagtsor	.2
tgaggaagid thaaqqiata atqagtgtta intipagadal qagottdagg actoottadi	£ *
aattoutgag tgtotaatug gotagatoot saggotgast goodtittos tgtitooaga	420
caaatottoo otaaaaotoa tggtoagatt aattitooto aaatacagtt taccicaaca	480
actiticate apogogotog agongatitog griogagggo gattgatgaa coaggoggit	540
ga	542
<210> 65 <211> 566 <212> DNA <213> Homo sapien	
<400> 65 Aaattottit igasatotsi sagggitata tittititoot tiaasisata igisassatt	6 J
aggittitaa aateettita aalaliittai tiotagigia ootiggagit oootittioo	120
neetttttgg ggaaagtttt gaaaatgttt tgiitttgtg talgaaaaga alageteace	180
Aaggaagaag gggagtgttt tiggtgaaat aggaaagaag totgaaactg taggagagga	240
ggggsatatg gccgctgata asaagcasta gaggaggggg gaaatactot tocataggaa	300
ggettecage tacaaagatt tgaagabatt titotgggga agtaaaacac taaatcagca	360
teatiticoa augoccagas astascilas tagatigili tiasatiaci gittisatic	420
agettgtgaa gatattetga atagtteatg tagaatatet taetattttg cagatacttt	480
ngtataaata giigocagig agaaatgiig caacigigic tittcaaatg aagtaaatag	5 4 0
gagagotagt atagogootg aaagaagtaa gigagtiata tigtac	585
K210> 66 K211> 656 K212> DNA K213> Homo sapien	
<pre>k400> 66 gbbasaattb bbbbbgacab bbcbcagggt tatatbbbb bbcbbbaact catatgboac</pre>	6 0
cattaggiff thasastock bitsastati thatticiag ighscotigg agilocciff	123
ttuotootti tigqggaaag ittigaaaat gittigtitt tgigtatgaa aagaatagot	180
caccaaggaa gaaggggagt gtttttggtg aaataggaaa gaagtotgaa actgtaggag	240
aggaggggaa tatggcogot gataaaaago actagaggag gggggaaata otottocata	300

iiradauttu	ragotianaaa	jattigaaga	iattiti ma	jąjiagtaau	a Jactaaat 1	:61
aguattatii	t tosasgoot	a filia it na 1	rhaatagatt	guirriaaat	ru itgttita	421
attragettg	tgaagatatt	otyaatagit	rangtagaat	atoutatiat	ttigdagata	45.
itt ot gtata	aatayhtgoo	agt gagaaat	gitglasing	tgtittttta	aatgaagtaa	i i i
ataggagags	tagtutagog	рот давадзв	gtaagtgagt	tatattgtaa	sttottgata	600
tacctcaggg	taagcastss	ttttagcatt	tattaaactc	trattatttg	tagagaaatt	660
atttagatgt	aggttgagta	ttectaatet	gaaaatctga	aacacaagat	gototaaaat	720
Usaasaragg	atgotomadag	gagatasttg	tttgagcatt	tragactica	gattitcaga	780
ttagggatgs	tgaastggta	agtataatgo	agatattoca	aaatctggaa	gaaaaaaaaa	840
aaaaaaaaat	gagoggto					858
<210> 67 <211> 593 <212> DNA <213> Home	o sapien					
	tgctcatatg	caagtttaaa	cacaatatga	atotoccatt	ctcttaaact	ÓĈ
agaggetaaa	aagaggassa	ggtgttcaca	cagaacttgg	ragatgatgt	tggccagttt	120
gaacgtiggag	aggattgaaa	atggatgagt	agggagggat	gstgagsggt	gattgggaat	180
stagsagetg	ctaattttat	agaatgogot	aaaataaacc	ttgtggatag	atattgodta	240
agostittst	atctctggtc	cttggacaga	gaattgttta	agteatttea	tgtttattga	300
gttattttgg	ttaatcatca	gtacagattg	cototaagtg	gtttttgcat	ctttttttta	360
ttatogottg	gtcacataac	ttotoggaas	ctcagtttcc	ttatttaata	ctctcaaggt	420
ngaatattaa	atcatatgaa	caggatttgc	aaastataaa	gcaatgctat	gsatgtaagg	480
ngtottttat	ttgccagtta	ctgagtcttt	aagggsaaat	tgtotactca	atacttggtt	540
tactgtgtta	ggattccatt	agggaagcag	aacccttata	aatattgtgg	aat	593
4210> 68 4211> 578 4212> DNA 4213> Homb	o sapien					
	ម្នងខ្លួនខ្លួន១១១១	aaacactggs	ttpactadag	адасаваадс	tgaagcaaag	6.1
ttgggattgg	ticcacagoor	agggrggaar	teactgtgts	cogagagtac	catgocacar	120

agtgootgog tgtgoototo catcacccag atggaagaga acgtgttccg aaaggcagag 180

```
casacagacag agnoticasas songitishas gggnochogo obliggggbbo obagosagbo
                                                                       240
aut galnalada (amna chor ch. ogagagos da (ch.ggalgagot) golagt cagot taloggotiato.
                                                                       300
raadababti gittitibbat aarbawqqga aarbibiqoi taaagaiggi ggatigaabt
                                                                       360
ravatabitta tobuntuuri narragaaan ygtantaaaa ogaagggatt tiittiittaa
                                                                       420
ggnankaath ackatganaa aataanugga agagagatgg tggagcacgo atcatettgg
                                                                       480
gggaacctga agaatccaac agccaaaagc agggcagccg gagagcagga caggtggaaa
                                                                       540
                                                                       578
ctgactgaaa aggoocagga aagscagtga cocacetg
<2105 69
:211. 730
<212> DNA
<213> Homo sapien
<400> 69
gggaacagaa gagagaaaac aaacactggc ttcactaaag agacaaaagc tgaagcaaag
                                                                        6.0
ttgggattgg tecacagese agggeggaas teactgtgte eegagagtas eetgecasas
                                                                       120
agtgootgeg tgtgoototo catcacccag atggaagaga acgtgttoog aaaggcagag
                                                                       180
casacascag agosticasag stigttatasin gggscottege stitggggtto stagsaagts
                                                                       240
aatgacaasa agcaccetot egggagcaca etggagagot geagteagee taeggetate
                                                                       300
                                                                       360
caacacactt gtttttccat aatcacggga aacctctgct taaagatggt ggattgaact
cacatattta totootitot caccagaaac ogtactaaaa ogaagggatt tititittaa
                                                                       420
ggcacaaatc acaatgacaa aataacagga agagagatgg tggagcacgc atcatctttg
                                                                       480
gggaacctga agaatccaac agccaaaagc agggcagccg gagagcagga caggtggaaa
                                                                       540
stgactgaga aggeccagga aagecagtga occaeetget geatecegaa gaaetgeeca
                                                                       600
gaagetcagg cootggaggt getgagegge totggaagtg tggggeaaggt gaeagtgaag
                                                                       550
agagetgaac tgtttgaaag tetettteag aageaatgag eteateeegg cacaaacteg
                                                                       720
scagttacgo
                                                                       730
<2105
      70
<211: 408
<212> DNA
<213> Homo sapien
<400> 70
ggggottgtg gttarogatg gaaarotgga gaagtgtgog ggotacatoa ttotttottt
                                                                       -50
caaragacto ggagtgtotg coolgggooa ggaactotgo otgacotoco agatgaggtg
```

tgigintaga abotitorti gggaagggaa ggagaggghi ggagianggg ggaghutgga	150
ratgaasaag aartaninno tyspagmaan attunnonun, abulattuaa ggtotglatg	24.
ngnnaga igg ngintag iao itigtatana itiagontato oggigotoao aaabahniit	300
gagat gggda itanagtina attindagan atngigtnaa aagnoaaann Haaqonigin	3 6 1
tghabragag inngtqoont tracaragan tggttaatat aaatotga	40ê
<210> 71 <211> 430 <212> DNA <213> Homo sapien	
<400> 71	60
jäggettete ettetetti	
laadagadto ggagtgtotg oostgggdda ggaadtotgs otgaddtoco agatgaggtg	120
ngtgtotaga accettocot teggaaegega aggagaegego tegegtateg eggagootege	180
acatgaaaaa ggactaccct otgacagtaa catttoocct otacttatto aaggtotgta	240
ngtgdddaga dggtgddtag daddttgtat adattagdtt atdddggtgd tdadaaadda	300
notorgagat gggddattad dagtgtodaa atttodagad atogtgtoda aaagdddaad	360
orangoutgt otgunocaeg ageotgtgee cettenacae canganetgg tthantautt.	420
aaaat otgaa	430
4210% 72 4211% 239 4212% DNA 4213% Homo sapien	430
42108 72 42118 239 42128 DNA	430 60
4210 > 72 4211 > 239 4212 > DNA 4213 > Homo sapien	
4210% 72 4211% 239 4212% DNA 4213% Homo sapien 4400% 72 1gggagadaa acatacocto digacottgg ggaagtgttt toodtgotot tgtgtocaag	6 0
4210> 72 4211> 239 4212> DNA 4213> Homo sapien 4400> 72 1999agadaa acatacocto etgacottgg ggaagtgttt tecetgetet tgtgtecaag ggggagttgg caggactgtt agaaatgagg gatgggcotc catttggcoc accatgggco	60 120
<pre>%210 > 72 %211 > 239 %212 > DNA %213 > Homo sapien %400 > 72 %gggagadaa acataccetc etgaccitgg ggaagtgitt tocctgotot tgtgtocaag %gggagttgg caggactgit agaaatgagg gatgggootc catttggooc accatgggoo %aatotocag agotggagag tagtaattto tocccottgg gagtggtgit gattototto %cottagago toaagtootg ggotagoago tggagaacag gactotgagg gactitoat %210 > 73 %211 > 333 %212 > DNA %213 > Homo sapien %400 > 73</pre>	60 120 180 239
<pre><210 > 72 <211 > 239 <212 > DNA <213 > Homo sapien .400 > 72 .gggagadaa acatacooto otgacottgg ggaagtgttt tocotgotot tgtgtocaag ggggagttgg caggactgtt agaaatgagg gatgggcoto catttggcoc accatgggco aaatotocag agotggagag tagtaattto tococottgg gagtggtgtt gattototto tototagago toaagtootg ggotagoago tggagaacag gactotgagg gactttoat <210 > 73 <211 > 333 <212 > DNA <213 > Homo sapien</pre>	60 14 0 14 0 14 0

		40			
aaatitiorag agitiggagag	tagtaatite	101111111133	gagtaatgri	gattononio	lei
totim agago towaggtoon :	gggntag sag	nggagaaca	ggaststgad	ggastitssat	24:
naguratgo attragggar :	rragtgaggg	igatgggooa	gotgoadado	otanagaan r	300
tgggctgagt gtgxagaggg	asaastggtg	14 14 14 11 14 14			333
<2115 74 <2115 636 <2125 DNA <2135 Homo sapien					
-k400x - 74 -ggtakkondes atattagagt k	orgotthata	caatataaga	gaatagtaac	tattcaagta	€0
nitgitaaga giataaaaag g	gagaaaatga	tigitottoa	cttagagaag	tacataatgt	120
ugogaaggat acaaaaacaa a	atataaaaga	aagaatataa	aaataagtgo	agotataaat	180
attataaaac aaattataag a	aggagttttt	tagcatttat	totatgttaa	aagttttaca	240
ttaatgtgtt tgaagtttat t	tttatttata	agtaactctc	tgaggaagct	acttaatgaa	300
taataaaadt gagadttgga s	actattaagt	ttttgcccc	tatagetete	aagttgagaa	360
otgagattta aagotggtoo s	atgggagaac	aaagtttttc	etetttetge	aacattactt	420
ggggmataaa aaagcaagag g	gstagttggt	atggatgagg	ttttatagag	aaggotttto	480
agggaaaatg aaasttgaag s	aacaaaacaa	taagagatat	aagaagttga	acctccttgc	540
titgsetati tgtgggaagt g	gggaagatta	tagattatto	aggaatatta	gaggtaaaat	600
toagttatto agoaatattt s	gttgagtgta	tactga			636
<210> 75 <211> 244 <211> DNA <213> Homo sapien					
ggattatttt tttttaactt t	tgaaatgett	aagaacagcc	tcagtaaaat	gtttatatos	60
taggragtga atgatttgat :	stotatagga	atgagstggt	tgttatcata	tcagaatttg	120
ggggtaaget acagatgeta s	atatagggac	atagaagatt		aaaattagtt	180
aagattagca aatagcatta s	aggcagtitaa	cottgatgaa	atacctagca	gaaatgggtg	240
atgt					244

^{00105 76} 00115 359 00105 DNA 00135 Homo sapien

```
4411 m
ggattatttt ittinisasti igaaatgsti aagaasagis toagtaaaat gtttatats:
taggragi ga angatingan sistanagga angagonggi iginahbaha bragaaning
                                                                       . . .
ggggtaagut acagatghta atatagggan atagaagath hittonontha aaattagtta
agattagosa atagrattas ggosqttaan httpstgass tacotagosa gasstgggtg
                                                                       2.40
arghiatori ggaacigota tipicotorio arbicitorio teagratitig coatoraaac
                                                                       354
cattitggaag offitggigot igatgeaftg cagtafffff fffffffff offitgagaa
<2108 77
<211 + \phantom{0}142
<212. DNA
<213: Homo sapien
<400: 77
bagt@bggga beagebgagb btotgeaggt gggbacaggb tgbtgeggbt ttotbobgag
                                                                        60
gdag: totgg gagettetgt etgeagagea coccaecear ageeteagag agtgggega
                                                                       120
otgt@gagtg gggtgctctg ca
                                                                       142
k210x 78
4.212 s
      DNA
      Homo sapien
4.2135
44005 78
ctgaatgaca gagcaagact ctctctctct caaaaaaaaa cagagagaga gagtttagag
                                                                        60
accadgeaca gt
k2105 79
42115 529
<212> DNA
4213 > Homo sapien
4:220:
w2219 misc_feature
1.2223
      --234-...388
<223 s n=a, c, g or t
44009 79
gtttitataa agootgaaac toacagaatt ggaagtotga gtgacacaga tatgttaaca.
                                                                       -60€
gaataacoca attgttticti aacaatggaa agatgtggga ticcagagago agtttttgit.
                                                                       120
thigithety stateaagig actionetes atgigataaa attiggagagi tigaactigaga.
                                                                       180
gttottoatt acadatacag otgactitat tgottactga attittgatac tgannnnnnn
                                                                       240
```

```
namananan manananan sakananan namananan sahahanana sahahanan sahahanan
HERRICHER BEREIRERE BEREIRER BEREIRERERE BEREIRERERE BEREIRERERE BEREIRERERE
                                                                 15.
innnnnnnnn nnnnnnnnnn nnnnnnnnad täldalaatd staadlaagg daatotgast
iggitisanin ggotunigig agostianaa tygaagggut otgisualia otigotgala.
                                                                 450
                                                                 529
adda taaqat otodaacata caoqqoatto aagaaatato tgttgatgg
<210> 80
<2115 567
<212> DNA
<213: Homo sapien
<220:
<223> n= a, c, g or t
<220×
<221> misc_feature
<222> (34)..(34)
<223> n= a, c, g or t
N2205
<221> misc_feature
%222% (46)...46)
%223% n= a, c, g or t
(220)
<221> misd_feature
<223> n= a, c, g or t
4220%
<223> n= a, c, g or t
3220h
4223 -
```

<220>

```
2 . . . >
:211 - mish_feature
salas ne a, c, g or t
<2205€
\langle 223 \rangle n= a, c, g or t
<4009 80
                                                                    6.0
atcaagtgaa gnotocotoa atgaatgaga tggnaactga actgantoto agggttaacc
aggtiggaga ataaagtgtg gogtgttota ggcagagggg hcaacahtgt gatcacaagc
                                                                   120
agagagggaa ggaaacnach tggtgtgcag aaggaattat gagcacttag gtgttgctgg
                                                                   180
agottaaago tgaataggaa gnactaattn tgtagocaga gataattggo aaaggtngaa
                                                                   240
                                                                   300
toatgaaggo oogtgttigo baggigaaga catatigigi abadabagbi igilattiib
attattgttg tattgcattt tggattggag stgtotgats aggtttgtgt tttagacaaa
                                                                   350
                                                                   420
teettetate ageagtgggg aaggtggatt teagggtarg aattetgaag catgaagace
agteagatgg cegttgeage agtteaggea aggacaatga ggoetaaatt aagaetgega
                                                                   480
gggtgaggat ggggaagaga aastagagto aagaaatagg tggttttaaa aagaagtatt
                                                                   540
                                                                   567
tagagggtaa aaagaatact aactggc
<210> 81
-211: 4158
<212> DNA
<213 > Homo sapien
k400% 81
atgagocacg gegeeggee ettaagaagt ettaaagtea tetatgatgg getaatggea
                                                                    60
                                                                   120
ctottcacga caageotgat tgcactgtta agotccagag gaaaaaatgt ggctatagag
tatattaaaa tazatacaat tgaaaaggaa gatgituatt iitgaaagca gaagattazo
                                                                   180
aadagaatgo taaaattaaa giiggadtai gaagagagoo dagigtadoa agigtadgig
                                                                   240
                                                                   300
caagocaagg acctgggoor caacgoogtg cotgogract gcaaggtgat agtgogagta
otggatgota atgacaacgo gocagagato agottoagoa cogtgaagga agoggtgagt
                                                                   350
gaggggggg ogcobggcab tgtggtggbb ottittbaggg tgabtgabbg bgabtbagag
                                                                   420
```

gagaatggg	ro aggiguagig	ogagotaotg	ggagangtign	etit tega e	raagustusi.	400
titt aagaat	. astabaroat	opthanogaa	grundantag	асоднувадо	gaaggantoo	1.41
ស្នេកគេ ស្រុក ខ្	ja otgragiggi	togggaongg	ggogagootg	ogetetemae	cagtaagtog	601
at coaggts	io aagtigtiigga	tgigaangan	aa ogogoogo	gitt ragera	googgtotan	*i *i .ī
galgtgtat	g tgartgaaaa	omangtgoot	ggogootaba	titalgoggt	gagigocado	
gadogggat	g agggogosaa	ugaddagutt	gostasticta	toutugagtg	ccagaticcag	780
ggcatgagc	g tetteaceta	ogtitotato	aactutgaga	acggetaett	gtacgccctg	840
agataatta	g actatgagca	gotgaaggad	ttragtttt	aggtggaagc	ccgggacgct	900
ggcagcccc	c aggegetgge	tggtaacgcc	actgtcaaca	teeteatagt	ggatcaaaat	960
gacaacgco	e ctgccategt	ggogootota	ccagggcgca	acgggactcc	agcgcgtgag	1020
gtgctgccc	e geteggegga	googggttac	ctgeteaces	gegtggeege	cgtggacgcg	1980
gacgacggc	g agaacgcccg	geteaettae	agcatogtgo	gtggcaacga	aatgaacctc	1140
tttcgcatg	g actggcgcac	cggggagctg	cgcacageac	gregagteee	ggccaagcgc	1200
gadddddag	je ggeettatga	gotggtgato	gaggtgcgcg	accatgggca	geegeeeett	1260
tootocacc	g ccaccctggt	ggttcagctg	gtggatggog	ccytggagcc	ccagggcggg	1320
ggogggago	g gaggeggagg	gtcaggagag	caccagogos	ccagtogete	tggeggeggg	1380
gawarctog	c tagaecteac	cot cat cot c	atsatsgogt	tgggeteggt	gteetteate	1440
ttaatgatg	g coatgatogt	getggeegtg	cgttgccaaa	aagagaagaa	gotoaacato	1500
tatacttgt	c tggccagoga	ttgatgaata	tgatgatgat	getgeggtgg	cggaggttcg	1560
acctgctgt	g gregeraage	ccgggcgcgc	aagaagaaac	tcagcaagto	agacatcatg	1620
otggtgcag	a gotocaatgt	acccagtaac	coggoocagg	tgccgataga	ggagtccggg	1680
ggetttgge	t cocaccacca	caaccagaat	tactgctatc	aggtatgcct	gacccctgag	1743
teegeeaag	a cogacotgat	gtttettaag	ccctgcagcc	cttcgcggag	tacggacact	1800
gagzacaac	ra datgagggga	catogtcacc	ggt tacaccg	accagcagec	tgatatcatc	1860
tocaacgga	a geattttgtd	caacgagact	aaacaccage	gagcagagct	cagotatota	1920
gttgacaga	s stogoogagt	taacagttot	gcattccagg	aageegaeat	agtaagotot	1980
aaggacagt	g gtratggaga	cagtgaacag	ggagatagtg	atcatgatgo	caccaaccgt	2040
gadaagtaa	g otggtatgga	tatattataa	aattgcastg	aggaatgtaa	agototgggo	2100
castragat	c ggtgctggat	gaattattit	greestratg	atggacgcca	ggotgotgat	2160
tatogsags	a atotgoatgt	tootggoatg	gaststgtts	cagacactga	ggtgtttgaa	2220

ant magaag	troagostag	agragagraga	i siliinaa	ootiilggnaa	agagaaggir	î.Eeî
itt sa sagsa	et et ggagag	gaagsagong	gatggautgo	tgaptaatap	gogagogost	2341
tadaaardad	ratatttgag	igaticacut	gantuagant	comanagtgo	tgggattasa	2410
ggogtgagoo	accatatorg	gooagttagt	antonintia	restataaat	astestett	2460
aa aam cacat	atituttigas	tutagittii	attabaaata	stpassatag	pagtottaat	2520
ttaggootca	tigicolige	cugaacuget	gcaacggcca	totgastggt	cttoatgott	2580
cagaattcat	accetgaaat	scaesttess	castgstgat	agaaggattt	gthtaaaaaca	2640
cananotgat	paga cag st. c	caatocaaaa	tgcaatacaa	caataatgaa	aataacaago	2700
tgtgtgtaca	caatatgtot	teaectggca	aacacgggcc	ttcatgattc	aacctttgcc	2760
aattatotot	ggotacataa	ttagtacttc	ctattccago	tttaagetee	agcaacacct	2820
aagtgctcat	aatteettet	gcacaccatg	tigitteett	actatatgat	tgtgatcaca	2880
etgttgteee	ctctgcctag	aacacgccac	cotttattot	ccaacetggt	taacctgaga	2940
ttcagttcag	ttgecatete	attcattgag	ggagtottoc	ttgatgatga	aggaaggatt	3000
aggtgtctcg	actcagtgtt	cctgtgatac	gtagtaaata	tcactgtcat	tgtaatotac	3060
attgetteaa	aattgtttat	gtgtotacct	cottgttcca	gcaacaaatc	attoctaaac	3120
totatggott	aastonasag	tcatttattt	tgotoacaaa	sttggaaagg	gcacagtggg	3180
gatggatgas	tgatgacttg	tatatgttta	atgtagcatt	aactggggca	gatataatgg	3240
aactggagaa	tocacotoca	agatggctca	ttcatacago	tgacaagttg	gttestetet	3300
gettgggtet	ttaggottca	tcacagcatg	gtagetgggt	tocaagagtg	agcatacaag	3360
gagacaggaa	gtggacgotg	ataggttatt	aaggtotggg	cccagaaact	gatacaatgo	3420
gtcatttctg	ccatattcta	ttggcaggca	gttacagago	tcagatccaa	gtggaagggg	3480
cagagtocca	ottgotaatg	agaagagtgt	caaataattt	tgggggacat	gttgtaaaac	3540
aactatattc	stttasgtgs	ccatgagete	tttcaggact	cagctggcat	ggeattigit	3600
tgotgaatga	aaggattcat	tocoggacca	aactgottoo	atagaacgtc	acagtotoag	3660
toatttgcac	caaggaggtt	gattocagac	aastsagtsa	catcaattag	caagaggatt	3720
aaggotoaaa	ggaaattagg	cttaaagtct	tatagcatgt	tagaaatggg	aagaatttac	3780
aagocaatca	aattatagto	otttattaaa	asaäsasaat	ctgaggtaaa	cagataaaaag	3840
aaaaagcaaa	gaacccatgt	gggtsagtta	tataaaaaaat	ggsagtgatt	caggatttgc	3900
tatatatggt	gaagtacatg	statttastt	gttcaatttc	tttattttag	caagttaaag	3960

```
steathaaan hiinagaat si gaalgagist gattaattii siibbsii gi caaaggggasa.
statttaitti tigiaastig ggtssygtit spagstatma tigitaatica asiistitgat.
                                                                  4 1 4 1
quoquardat tirtiqqiaa aatqttitqt qqqacadtaa igadicaaat ootatgcabt
                                                                  4156
garatgratu bagobatt
4210 - 82
<212>
      DNA
<213> Homo sapien
t4005 82
                                                                    60
maagaacaat tittitgoatt gicatcattt atgtataaga gacgaagitg taaaatagoo
rocatagaat dagaattaga gaaddtggaa gagtgtgoto taaccaatgo accattttoo
                                                                    120
agcaaagcad attitititt totadaaagg aaactotigg aacaagtaga ciadactiid
tgtcattcoc atgtatggaa gaataaaaat ggccacaagt tatttgcago toottaogto
                                                                    240
aagagttgga gtocattggo tgggtgtggt
                                                                    270
<210> 83
<211> 612
<212 > DNA
<213> Homo sapien
<220×
<221> misc_feature
<222> (349)..(456)
k223 h = a, c, g or t
<400> 83
caaaaccaaa caaaactdac cactacattt adutdedtod adddaactdt taaqttttqt
                                                                    50
                                                                    120
tgaagtgacg gagacaaaaa cotaaatgga gtgggagaga aattggagac agaaagaacc
cttcagaggt ctgttgtaaa aggatgcaaa gaaacaggga actagaaggg attgtggggt
                                                                    180
ccaaaggaga aataccagca cgtttgtatg ttgtcaataa tgtttcagta gaaaggtaaa
                                                                    240
aattgagaca agagagaaga aagtgtagot ggotagtoca acatoctaga atagocaaga
agggatggga catagtgcaa aactaggctg resaaagsag agtttttcann nnnnnnnnn
                                                                    360
420
nnnnnnnnn nnnnnnnnn nnnnnnnnn nnnnnnaact ccaagaattt gegtttitag
                                                                    480
caagstroong gasgattota tigotagota ggtooragaa acotoatatt tiggagaacca.
                                                                    540
stgtatsasa aggagggaag asagaaaaga tgagtatata sattagtasa aatgotgaas
                                                                   500
acctgggtta to
                                                                    512
```

```
<111.5 - 64
<1.11 + 141
<211 - 2NA
k2180 Homo sapien
32235
%221> miss feature
<2004 Dée ... 266
(223) n= a, c, g or t
k400h 84
gotteaghth cuboccasag grightightal lightaithtia tiggtheaght caaaataith.
                                                                   - 6 G
totosataco attgactoty tototytytt attoaggett ytttttacay ttotttatty
                                                                   120
atticiatet taaatgeaet giagiaaaaa aigacaatta tiicaattiit caaaattici
                                                                   180
tgagttgott tataactaag tatgtggttg actgtggtga tgtgtctgot ttcaaaaaac
                                                                   240
ighacattot gattitggto gigetginot glacatatia atigogical ittiadalda
                                                                   300
igttatteac gittoctata tocttaacit itetetiget ag
                                                                   342
<210> 85
<211> 1035
<212> DNA
<213> Homo sapien
4220×
<221: misc_feature
42223 (97)...179)
<223: n= a, c, g or t
44005 85
attitiotyte traffitget greettitte taacticity aaaagggatt treageteaa
                                                                   50
                                                                   120
gastittsag actottotaa tasasttast tatggonnnn nnnnnnnnn nnnnnnnnn
180
traatarrat tgartotgto totgtgttat traggerigt tittaragtt otttattgat
                                                                   240
ttotatotta aatgeactgt agtaaaaaat gadaattatt teaattttea aaatttettg
agtigottia taactaagta tgiggitgas tgiggigalg igicigotti caaaaaaactg
                                                                   360
tababtutga ittiggtugi götgit nigi avatalitaat igogicatii biababbatg
                                                                   420
ttattoacgt ttootatato ottaattitt otottgotag tottaacgat tagtgagaaa.
                                                                  480
grootgitaa aattabobaa tatgabbagg battiittiit ottigtaatt bigibactib
                                                                  540
actitigatite atacguatit ticatitaggi actitataaat titaaattita aaacacatti
                                                                  600
```

omititiaga midagaagt m	at otlasgabt	· · · · · · · · · · · · · · · · · · ·	arevertica	tatoonat m	4.6.1
gt ratiatitha laaagutatirt	at atgradas	tiga tgt taat	agacatgatg	tawaagaagg	1 41 3 1 41 2
gggtggstot ggtaakgsta	aagtaactes	astatgagag	tgrattaast	atgggggaaa	
tactitistat attgcagaac	acatatiitgg	tagtaogtag	cotoacatog	spacooggaa	ē40
aagtotgoat atuttgaatt	tiggaatiggat	nuaantgrar	tgagtgcaaa	attgtaaatt	9 C C
gratittata taaatgitti	agaastagat	gatggagcag	atgggatsta	ttaagagaar	960
ggggtgccag atgactgacc	ataaacatgo	tttttaataa	agactetget	gagagattaa	1025
ot matagada adada					1035
<210> 86 <211> 662 <212> DNA <213> Homo sapien					
<400> 86 aaagaacaag acaaaggaat	tcagagettt	caagaaccaa	gtatgtcagg	atagttgtgg	60
aaaacagate titticicat	tttotttgag	atgaagatag	gcaacatttg	otgoodatta	120
aatacettaa aagtatasag	gtgtatctgc	aggattottt	ttgatgattt	taaatagtat	180
atigittiaa aaggicigit	tttatettge	ctttacaatt	atatagastt	ttattgacta	240
gotgatoata tagggootta	gtatagacta	ccatattogo	cagcatttaa	gaaatagtcc	300
pottocotoc aggagagtat	ttatotggta	ctcccatatt	atggattgaa	ggatgagaca	360
agagactgag tattgctaat	agttatgtgt	gagootgoag	tgttaagtaa	aacctattga	420
gtgcacaaaa aaatcatgtt	acaattacta	caaaatagag	aaaccaccta	ggttaccaag	480
atgtraaata atggattaat	ggaagaaagt	aatgtaccto	cttggtagcc	tacataatcc	5 4 0
accttaattt gttatttott	atttaactat	tttgctatgt	cttaagaaat	gtatattaag	600
tgaaaatgga tgcataaaaa	taaaaaaaga	gaaatgtata	tatacaagct	acatgaaaat	660
all					662
<pre></pre>					
<pre></pre>	cttcatttct	ggastttasa	gstatgaaag	aacaagacaa	60
aggaattoag agotttoaag	aaccaagtat	gtraggatag	ttgtggaaaa	cagatotttt	120
totoatitto titgagatga	agataggcaa	catttgotgo	ccattaaata	cottaaaagt	180

```
abadaggbigt (abing magga) binnbinn gu ngubibihaaa bagbababig hibibaaaagg
                                                                      2.4
punginitah bernggarah Jawashlahat agaut bilah bgadi agong abbahabagg
gortitagoat agabtabbat attogodago attoaayaaa tagtoubott bubtobagga
gagiattiat oiggiactoc catattaigg aitgaaggat gagacaagag acigagiatt
                                                                      420
gotaatagtt olglglgago olgcagtgtt aagtaaaaco taltgagtgo acaaaaaaat
                                                                      480
catgitacaa tituctacaaa atagagaaac casciaggit accaagatgi caaataatgg
                                                                      540
attaatggaa gaaagtaatg taccticottig gtagoctaca taafccacct taatfigtta
                                                                      500
Sincethatit adolatitity oldigiosta agaaalgial altaagigaa aaliggatgoa
                                                                      660
taaaaataaa aaaagagaaa tgtatatata caagotacat gaaaattggt ootgggaata
                                                                      720
aatcaagaaa ttcaaccaac aaggctacca gttatttagt aaataccaaa gagataggtg
                                                                      780
gatgtagcag taccgaatat cacagtaaga tatgagtagg tagttccact coctectacc
                                                                      840
caactcagtt ttattagaaa attcccgctg ccaaaggggc aagg
                                                                      884
<210> 88
       528
:211>
      DNA
:212>
<213> Homo sapien
<400> 88
caccactggg tgcctgggca gttacccacg gtggacaaag ggcaagagcg ctggttttgg
                                                                       60
                                                                      120
agreagatag atgtgetetg ceeteeegee tecagggetg ggeteeeagg ttggetgtgg
atocagagag tigigaggga gaggtaaaat gigigigaaa gitotiggta aacacccago
                                                                      180
cactatatat tatgagtggt agcacctaat stoottaatg atatttcagg tgccatattg
                                                                      240
agticationic actabagaco ottobagagg gittitoctoc abiagococa giattaboat
                                                                      300
tggtctggcc ttattatttg tatctaatgg ggttagactt tcccttccat gctgagaaaa
                                                                      360
agttgtottt aagagaatgt gotgaasaat sagggsssag aaaggsaasa asgaatattt
                                                                      420
tgcatgccaa gaaggaggca aaagaggaag tggaattgta cccaaatatg sttataatag
                                                                      480
gtgttatttt agstgagstt gtaaggssto saggagggsa gggtatta
                                                                      528
      89
<22125
      1282
<211s
      DNA
<212>
4213×
      Homo sapien
k4005 89
gttacttatt toattotgat pacattitico agtacaaata catggaggto ccaagtgcca
```

```
laagittabalaa laalaalaa ra loragitootiga tooragittiga aalaa raigi laagabattitti.
turthtaaalma ottogagania agtigagaga kaasoungoat tigagggaggt gabinbaatibg
                                                              131
ctaagajang gggagginaj braggatgaa Gauttggint gtataatotig tiggthabhan
                                                              2.4.0
tgygtycotg ggagttacco acggtygaca aaggcaaaya gogotygttt tggagtcaga
                                                              300
tagatgigot oigopoiloso goriosaggg bigggotoso aggittggolg tggalobaga.
                                                              3 6 0
dagitotgad quadauqtaa aatqidtoto aaaqitottu qtaaabacco aqobactata
                                                              420
                                                              480
tattatgagt ggtagmacot aatotoutta atgatattiu aggtgccata tigggtcato
otoactaaag anoottoaaq aqqqttttoo towaatagow coagtattaa cattggtotg
                                                              540
goottattat tigiatoiaa iggggitaga otticootto baigotgaga aaaagitgib
                                                              600
tttaagagaa tgtgctgaac aatcagggcc cagaaaggca acaacgaata ttttgcatgc
                                                              660
caagaaggag gcaaaagagg aagtggaatt gtacccaaat aatgcttata ataggtgtta
                                                              720
ttttagetga getgtaaget ceaggaggge agggtattaa tatattgagg tgttggetga
                                                              780
geactgtgge teactectat aateteaaca etttgggagg ceaaggtggg aggatgaett
                                                              840
                                                              900
gagaccagga gttogagacc agoctgggca acatagcaag acctogtoto tacacataat
ttaaaaaaat aggcatggta gogtgogort gtgattooca actactoaag aggotgaaga
                                                              960
                                                             1020
aggaticating gagactiggga iggticalaggit gradtgagnt gtgtttgicat cactigcanto
                                                             1080
cagootgggg gacagagcat gacootgtot caaaaaaacaa acaaaaaaaa aagoggaaga
                                                             1140
1200
                                                             1260
agagggagga stotasaaat aa
                                                             1282
```

```
<211% 286
<212% DNA
<213% Homo sapien

<220%
<221% misc_feature
<222% (259%)...259%
<223% n/m a, c, g or t

<220%
<221% misc_feature
<220%
<221% misc_feature
<220%
<221% misc_feature
<220%</pre>
```

<223> n= a, s, g or t

<2105 90

```
32200
\begin{array}{lll} \sin 2 \, \lambda & \sin \beta \, \eta & f \in a \, t \, u_2 \, \cdots \\ \cos 2 \, \lambda & 2 \, \theta \, \delta & 1 \, z \, d \, \delta \end{array}
%223 + n* a, b, g or t
:221.
>221> miss_feature
%2226 271\(\bar{1}\). 271
\times 223 \times n = a, \sigma, g or t
<220:
<223 · n= a, c, g or t
k400: 90
gotogagggo aggtgaataa baggbaatgg aaatgbatgg aaatgcattt gtgagbabag
                                                                              120
tittiggaacg attaaagcat titatittagg taatagagte tictigtetta tittitetagt.
                                                                              180
agaggaattt tagtttatgo tacaatatca agatatctga tttaatccat gcatotctga
aggatgtatt ggtttottat ttottitaat tgagagagit gttgaatgat ttaatagaac
                                                                              240
tttggaattt tcaaaaaana aannaaanta nattaanaaa attitt
                                                                              286
k2105 91
<211> 644
-212: DNA
<213 = Homo sapien
<400> 91
acaghtggaa atgeaghtat terghagean acagghhagg baaaghthet thethetght
                                                                              120
tolagagott giaaacalag gagogattyg aatagittaa goaaagioaa agigagaaaa
tatgcagtgc cagaagcttg tgtgagggag tggaaatttt tgcacaaaag ccagaatttg
                                                                              180
actagataat actiticaaa tigiggiddo igoagiggoa tiadaiggga acciggiata
                                                                              240
adagcadatt attgggtoto dactadaato cactgaatoa adaacottag ggggttitttg
                                                                              300
agoccagaga tocatgtttt aacaagocco toagtgattt tgttatgcat taaactttga-
                                                                              360
gaaccastgg actamattat gitggttitt chatggcagg tgamtamcag gcmmtggmmm
                                                                              420
tgcatggaaa tgcatttgtg agcacagttt tggaacgatt aaagcatttt atttaggtaa
                                                                              480
tagagtette tgtettattt tietagtaga ggaattitag titatgetae aataleaaga.
                                                                              540
tatotgattt aatocatgoa tototgaagg atgtattggt tiottattto tittaattga
gagagttgtt gaatgattta atagaacttt ggaattttca aaaa
                                                                              544
```

```
2000 - 32
 2112
      DNA
 1. 11. >
chlas Homb sapiem
:400> 92
ottacticag otgoaaatta ottatattaa Laaagtagga totatcaaat tagagaaatg
                                                                       ÷ î
atatatggda toattgggat tittbatattt aatabaattt atbatttttb tggtbotgaba
                                                                      120
ttaagogatt tatttggaat titttoopit algadaaaat tiatoaatda alggbaadtd
                                                                      180
                                                                      240
otttagtadd toggicatti gabgaggigt tilobaggga alfflggiogi bellagrata
thatthagut attiticagic agaiccaaic titagatata aaaatatatc attitgattaa
                                                                      300
                                                                      360
tggtagttac aagagggtga aagoggtact gtttatcaga ttotactoct totogetott
aggaeggeet catetgaeag eeteetgaet aattatggee aettgttaet aettetetgt
                                                                      420
yttocaagtg ogtaaaacao atgoaaggtg ocaacaatga gaagtoacto totocagoda
                                                                      480
ggattteeet eattgtgttg geacaaegaa teaaaattaa tgtataatgt teattttttt
                                                                      540
agaactetoo ggtotttgaa otttootott tgaaataaaa altiototto tgoocattgt
                                                                      600
gaattagage eteattteea eataaageat tigtattige tittagigat tiaataeige
                                                                      660
statiagest agestatet gaastaassa atagasatag saattagast seettigast
                                                                      72.0
                                                                      780
tttacatttg tttgtaattt cagtatctca agtggattta tgttaccatt tcaaataagg
agtitatata gooogggcaa tgitaaggig tiitaataaa ooaaaggaca aaaattaagi
                                                                      840
                                                                      870
aaacttgaaa gaatgtcaac tgaaatatct
<210>
       93
<211>
       499
<212>
      DNA
<213> Homo sapien
4400> 93
                                                                       60
ggcagccaag cacaatagco atacactaca caaggcaaca tottootcag gggttattot
tottttaaaag gaagtagtgo agoottootg tiggtigoot totcaattac actitactag
                                                                      120
gttotgocot ttotacagto tttotactta gttaacgtag ttotoctagg ccacaatgot
                                                                      180
titaccacat acaacatotg titaacagig gitatitati caagagetgi tatotettig
                                                                      240
                                                                      300
acathagety gaaggtagga ggeattggtg acttttetet gggtatteag tattagatat
gtoottggtg godatatttt ocadagtgtt tacaaattag adaaatdagg gtttotgggt
                                                                      360
                                                                      420
ggctaggaag gtgagagttg atgaatgtga gagagaaata aaacaaactg gcagaaggaa
ggagaggtta aagaaatoot gttoatttoa aaggottgto tgattototg googtgtatt
                                                                      48C
```

ot at gama mailt onto gaut	433
<pre></pre>	
(400) 94 ggragopaag bawaatagoo atababtaba baaggdaaba tottootoag gggttattot	6 0
tottitaaag gaagtagtgo agoottootg tiggtigoot totoaattad actitactag	120
gttotgodot tinhadagid tilldiastija gilladiglag litotoolagg ocabaatgol	180
tttampapat apaapatotg titaapagtg gttatttätt paagagotgt tatototttg	240
acataagotg gaaggtagga ggcattggtg acttttotot gggtattoag tattagatat	300
greetiggig gesatatitt ceacagigtt tasaaattag acaaatcagg gitteigggi	360
gotaggaag gtgagagttg atgaatgtga gagagaaata aaacaaactg gcagaaggaa	420
ggagaggtta aagaaatoot gttoatttoa aaggottgto tgattototg geogtgtatt	480
statgaaada tosttgaato otgggtttot taagttggot ggagtgggot gotgtaattt	540
gaggitaaga aaagtooaaa traatataot atoootooag tgagotgoaa alaltattoa	600
tatatastat aaataaastg ggtgataagt tggttttaat taatgatatt scaa	554
<pre>1210> 95 1211> 431 1212> DNA 1213> Homo sapien</pre> 1400> 95	
gtttgagdda etgtgtddag cetgaaagtt uttgadtdaa gtggtgggaa acadataatt	60
.gageettta tgaactetaa aatetattii gicagetaca tgattitaet tgeaatigea	123
ttgacacaga totattoatt gaacatttaa gaattgtott ttoatoatat ogtatatoto	180
atatatatga gagaacatot titagtaaan titacaagtg gtottottit tacatattaa	240
atgitgatg aatgitaaag tagmaaagad tmaagedett accatactaa tgittidiidi.	300
nttcaagaca gatotttatg ggcagadaca cagaaatgga agtagcagat titaagaada	360
rtgattcaga otttgaactt gtatgacctt atatttattg atttatttga gtcataagat	420
teatgggtet t	431

^{.210&}gt; 96 .211> 616 .212> DNA

```
<213 > Homo samien
.221 - hisr feature
       15 ... 11
 ح شاشا
<2232 n= a, b, d or t
:2215
x221.4 misc_feature
<2009 (61)...61
<2009 n= a, c, g or t
< 220:
k221> misd_feature
k2225 -191 ...191
\pm 223: n= a, c, g or t
44002 96
                                                                          60
beagggtice ggtingtitt detgtgtget ggttegggge catggetgee aaeggeaaet
                                                                         120
needingggg cacagagtag gitteetgig agetggtegg ggceatgget igeogeetig
caattgoodd tgggggdaad agadttaggt tttdatgtga gottggtogg ggddatggdt
                                                                         180
geogeoggea netgecootig gggcaacaga gtaggtttec tgtgagetgg teggggcoat
                                                                         2.40
                                                                         300
ggetyeegee tgeacetgee eeggggeaca gagtaggttt cetgtgtget ggteggggee
                                                                         360
atggetgeca coggeacoty cootggggea bagagtaggt theotgtgag tiggtogggg
                                                                         420
scaeggetge egeetgeact geoetgggge acagactagg titleatgtga getggteggg
godatggotg cogooggdad otgodotggg goadagagta ggtttogtgt tgottggaad
                                                                         480
attaaggogt aattitigatt cagittitioc taaagaagga tilitigoatti tiatggotti-
                                                                         540
tgraptingg gagaaagott cirtatiting gatgrattin agaagggogt totaltaaan
                                                                         600
atgastotgo aaacag
                                                                         515
<210> 97
<211> 1636
<212> DNA
<213> Home sapien
<4005 97
otgittigoag attoatgitti aatagaalgi intiintgaaa tgoatooaaa atagagaago
                                                                         50€
tttotoooga actgoaaaaag ooataaaaaat goaaaatgot totttaggaa aaactgaato
                                                                         120
aaaattacgo obtaatgito caagoaarac gaaacctact bigigoocca gggcaggigo
                                                                         180
oggoggoago catggoocog accagotias atgaaacota gtotgtgooc cagggoagtg
                                                                         240
taggoggoag cogtggcood gaccaactca daggaaacct actotgtgoo coagggoagg
                                                                         300
```

tgorggt ggr	арттатургт	ongabuagira	па съд дъза.	mast otgt g	nnunggggaa	3 6
dar å Ledåld	graginat įg	ropiyat raş	т тарадува	actuationg	tgarangagg	421
Jaggt g lagg	ragragrist	ggoorgars	agotbacagg	aaanstagto	tgtquoiag	480
ggnagtgnag	gogginagong	tggorongas	caget casag	gadarutast	utgtgoodda	£40
gggcaggtgc	ogguggsags	ogt ggoddog	accagotoac	aggaaaccta	etetgtgess	600
cagggcaggt	geoggoggoa	googtggood	ogaccagoto	acaggaaacc	tactotgtgo	660
catgggtcag	ggcaggtgcc	ggcggcagcc	gtggccccga	ссадессеса	ccagootuag	720
rtgitologa	rotgotocag	gtocagotoc	cagogggood	cgggggaaga	agadataata	780
adagadaatg	tecesateas	gggggtoccc	gotgeteetg	cgggagccat	cactggtcac	840
cgactcccta	gaggeccaca	gggggagcct	ggcacctgga	gtoctotgga	cttcaggcac	900
tgettetgge	agcaaagctg	cacccccacc	ccaggagggg	ctgatgactg	agetegagte	960
ctgtggaggc	aggacagcca	caggaccetg	cotgoccact	ggctcagaaa	gacceteest	1920
toggotgoda	gggccctgcc	cgagtgtggg	gcacteccag	gecetgggee	ageggaagea	1080
gtteegggag	actgcgcagg	scaggaaags	ccaggtggcc	tgggageece	ggtcagctga	1140
aatagaactg	gagaaaraag	aagettggee	adadassessa	gcaagcaagg	gggagcggca	:200
ggateatgga	gtgggaagtg	aggt net ggg	tuuddaddaa	actggaatct	tecetecaet	1260
accaggaggt	ggggcaggca	gagecagece	agcagaggcc	cccggaagcg	tcaggaacaa	1320
caggaaaggc	agccggggca	cagggacttc	ccacactccc	caccccgtcc	accccatcgg	1380
coccatocae	cccgtgcacc	ctgtctaccc	catotacogt	casttsssts	tgcactctca	1440
actttcccga	eteetgaeet	tggaggaget	gaactooggo	ctggccagct	gtotgcagtg	1500
tgggaccctg	tgetecteca	cgtgggagee	ccagggtgcc	cgctcagtgg	ggatotgtas	1560
actgacacata	acagagatot	accatgraga	gacotcagac	ttgogtggga	sataggaagg	1620
cccctgggtc	cattga					1636
<210> 98						
<pre><211> 638 <212> DNA</pre>						
<213> Homo	sapien					
k400> 98 gbagagatta	totoagagag	ototttgann	atttaattta	taaataatto	tacttgtgtt	51
ttetttetas	tttpaptagt	tttatattta	cacttttaaa	aaatgttgtg	tttcttattc	120
agggttttgt	tttggactgt	aatattttat	agaaatttta	ggattacttt	cataaaaatt	180

tottaataot toagagotaa tioaagaaan oudijigist laabgibagg aagitaacig	1.40
t binauataa ingiuttigga gitgitutga attgitgati anggilitmaa ataattatut	3 1 1
gapagginti nggitaggaa initipingsi gopabasasi gitosiging agaatgiaga	360
ggtapätttt ggastitätä titttatgaa apattiggaa ggttggggtg gtggatgspa	421
ggottocaaa cicagaaaga tgtatootgo tagactaoga goatocitaa tottoaacat	460
gggttaatig gaiggigggg agiatilget ligatilool giglataabi cacogaiggg	540
titopattgt tigattitot togoggatag gittittoaga tiacaattag totaaattag	601
otqqtqngqt ggalatgant gtaaloodag caogttga	638
<210: 99 <211: 1253 <212: DNA <213: Homo sapien	
<pre><400> 99 aaggtactgc ctaaaggttg toatottaaa tagcaactgc tgtttttcac toataagttt</pre>	60
ggatgtatgt agcaaataat gtaggtttto tattgagatt tittggataaa ctattattit	120
ttotaataga gigataagai attotoladi tigololdat loigaaaalo agotaddatg	180
aatattataa ottacatotg tiatotigot toagoatagi aatatttaaa gigattaaag	240
gaaacaaatg titaccitco aaaagatgca ticattitat toattitatat aaaaaaactg	300
cacgittaat atatacatti tgagigaagi caligitaat laagggalgi tacagoccci	360
tttgtactat gaagagactt tatgatttto tttotgttaa gggtagtatt tacataaaaa	420
ataatttoat caaaccagag agaggocaac agacattaca tgtoatotoa ggtggttoca	480
agcagagatt atotoagaga gototttgad oatttaattt ataaataatt otacttgtgt	540
titotitota otticactag tittototit ocacilitaa aaaatgiigi gittottati	500
cagggttttg tittggacig taatatitta tagaaattti aggattactt toataaaaat	660
ttottaatao ttoagagota attoaagasa ootgtgtgoa ttaaogtoag gaagttaaot	720
gtoccacata attgeettgg agttgttotg aattgttgat tatggtotca aataattato	780
tgacaggttt ttggttagga attittatga tgacacaca igttactgit gagaatgtag	840
aggtabattt oggabtttat attittatga aabatttgga aggttggggt ggtggatgob	900
aggittotaa atopagaaaa atgiattiig ttagaptatg agtatoopta atotttaapa	960
tgggttaatt ggatggtggg gagtatttge titgatttee tgtgtataae teacegatgg	1020
gittocattg totgattoto thogoggata ggtototoag attacaatta gtotaaatta	1380

```
goorggiging giggoacate actgoaator cagcantote agguaggiota agenaagings.
                                                                      12:::
atogetigag etogaatica agantagnit gggbaasatg gegaaasuet gtototacou
aaaaaaacto atgorgaati stigootogg ggobaaatoo ciatgiggas aat
<211 > 101
02115 1479
02129 DNA
32118
<213> Homo sapien
<220×
<221> misc_feature
32224 (778).../78
<223 \times n= a, c, g or t
<400> 100
gtotttggta gaattotatg attotaaagt gotgtgacta caagtgtgga caggtgtaat
                                                                        60
cactitiacet etacactgee egetgeatge tgacactgee titleatatgg tgggcattea
                                                                       120
acagcaacat teetgtggag tatagatgge tatgactaag gtagtgtaag tggtggteet
                                                                       180
                                                                       240
tataaaatat getetgettg eettagggga aaatagttee ttaaaaaegt teteateeaa
ctrotoagtg ttaagatato taaacaaaag tgachabato tatabacaac agtaatgaca
                                                                       300
                                                                       360
cutgadagaa tittittaaca gatadagaac agtactooca tggitatqia accaaccaac
taggaaggag agactitaaa attgacaaca toocagagat gitatatoot aagitatgaa
                                                                       420
tgtgotgoog ttgaagaaaa aloagottto toatattact bacatataa tattattaca
                                                                       480
taacaatgtg ttaaattgga ctacagtgaa tcaaaagagtt attgcagctt ctgaaggtga
                                                                       540
                                                                       500
cagactitita actiticagat altigolitaat gootgiggaaa cootgiggaac caegocaagi
caatttaacc aagettitge titttageca geigigatgg iggittetac atagteigga
                                                                       660
                                                                       720
taaatocaag aataotttoa tygooctagt gaaatitgoo tiittgaaat taitaggaaa
                                                                       780
argaaataca cattatgaaa ottotatcac tootaaagaa aggggaaaac otattaanaa
tgaagotott atttactaat goatttotat ttoaggagoa tttggotaaa otgggggacaa
                                                                       340
aaaacaaaaa ottigttotta attaacaaaa gaactagaaa gaagctoata tgaaagcacc
                                                                       900
                                                                       960
accttigtigtt bagtaagett caggataget stigttigacag bagggcattit agagagtoob
                                                                      1020
aagtatagto atgtatoach ggggagggaa gaatottiga ggacatotag titacaatot
ttattattit toaggigiag aaaagagatt aaagatoata gaagtoagaa taaattigia.
                                                                      1080
amagtitetsa tagteamaan agetmagtam tygenattyes emgasteemm matestymis
                                                                      1140
```

agaatataaa toaccaattg ttggtttaaa ggggttattt gtgaatcatt ttocaaaaaa

agaagtabab totttgtgtt abstabbatt toaaagaaab toattottba agabbattor	1260
agaittoitt aggaatgiat gryttainna taantgacca ottoaaactt gtaagaaaaa	1321
asaugutang gepatnings nanininaga garasagnat inobaators gyptnybata	1380
maanmutgag gougugagat mattagtmaa tigototaat tabaagoom guttitutti	1440
aaatotaaaa actaataaac atotataagg tiaaaaaaa	1479
<210> 101 <211> 2313 <212> DNA <213> Home sapien	
<400> 101 gtactetega tgttgaatgg gagecagetg attaggagag ttaatgagag etacaataga	60
ottgttttaa aagaatagga caaggoaaao actaaotoga caagtattoa acaagaatgt	120
oottagataa oottagaata tatoaottta tacagoattg tattittaaga tacaaaaatt	180
ggagatagtt otoaagoato tittooagtoo tgottgtgaa tottagooca agataggtto	240
aataatggat titaagioot oolaggogit ggagigoaac ilaacaaaca ooaalcagga	3 0 0
cttttattag taagaagaaa actaggaaag stgttgttt ataacattaa tggtctgcta	360
ottitaaett tgattittea iggattitti aaaagtaatt teaagigtaa gagacaatii	423
aggonaatoa taacatatii tatoagagao igigcacaaa gggcaciitti aggiagoiic	480
attotocaca ggttotatac ataaatoatg aggtgttacg agaatattgg tocaggaato	540
agaaaagtgt ggaatttaca atcacctaaa gcaatatgac tttaagaaaa totgttacct	600
occatoatot cootttocca tootgitaac attiggiggi gatagatita gataagitga	66 0
cattagtata gatactitae tattataaga ggttgtcttt ggtagaatte tatgattcta	720
aagtgetgig actacaagtg tggacaggig taatcacttt acctotacae tgeeegetge	780
atgotgacas tgostttcat atggtgggca thraacagsa acathosigt ggagiataga	840
tggetatgae taaggtagtg taagtggtgg teettataaa atatgetetg ettgeettag	900
gggaaaatag ttoottaaaa aogttotoat ocaactooto agtgttaaga tatotaaaba	360
aaagtgacca catctataca caacagtaat gacacctgaa agaatttttt aacagataaa	1020
gaacagtast sosatggtta tgtaascaas saastaggaa ggagagastt taaaattgas	1080
aacatoocag agatgitata tootaagita tgaatgigot googitgaag aaaaatcago	1140
tttotoatat tactoacata tatatattat tacataacaa tgigttaaat tggactacag	1200
tgaatcaaag agttattgca gettetgaag gtgacagaet titaaettte agatattget	1260

```
taatgorigg gaaaccotgg gaaccangoc aagtoaatti aaccaagcit tiguttitta.
                                                                     1321
                                                                     1350
giragotytty atygtigytti otabatayti tigqataaato baagaataot tobatyydoo.
tautusaantt tuuuttitu saattattau daasatgasa talabattat gaaabttota.
                                                                     1441
trantinitaa agaaagggga aaasstatta aaaatgaago tottattitao taatgsättti
                                                                     1500
statttsagg agsatttggs taaastgggg asaaaaaaasa aaaasttgtt sttaattaas.
aaaagaacta gaaagaaget catatgaaag caccaccttg tgttcagtaa gettcaggat
                                                                     1620
agototgttg acageaggge atttagagag teceaagtat agteetglat caetggggag
                                                                     1680
ggaagaatot tigaggabat olagiittaba aloottaatta tottibaggi giagaaaaga
                                                                     1740
                                                                     1800
gattaaagat catagaagtc agaataaatt tgtaaaagtt ctcatagtca aaacagctaa
gtaatggcat tgcccagact ccaaaattct gaccagaata taaatcacca attgttggtt
                                                                     1860
                                                                     1920
taaaggggtt atttgtgaat cattttccaa aaaaagaagt acactttttg tgttacttac
catttcaaag aaacttatte ttcaagacca tttcagattt cottaggaat gtatgtgtta
                                                                     1980
codataattg accaetteaa aettgtaaga aaaaaaatgt tatggteatt tigttattti
                                                                     2040
tagagacaaa gtatttotaa totaggtttg batabaacot tgaggotgtg agatbattag
                                                                     2100
                                                                     2160
toaattgott taattataag cootgiitti tiittaaaato taaaaactaa taaacatota
taaqaattat aacaqattah titoottuatt aaattacttt qtaatcaagt totagattaa -
                                                                     2220
atgittaaac aigcattaaa ggattagitc tatcicaaaa gacaaaataa aacicgaggg
                                                                     2283
gggctccgta ccctattctg ccgatagtga ctt
                                                                     2313
<210:
```

```
<212> DNA
<213> Homo sapien

<220>
<221> misc_feature
<222> \(\)138\(\).\(\)184\(\)
<223> n= a, c, g or t

<220>
<221> misc_feature
<220>
<221> misc_feature
<222> \(\)189\(\).\(\)189\(\)
<223> n= a, c, g or t

<220>
<221> misc_feature
<222> \(\)189\(\).\(\)189\(\)
<221> misc_feature
<221> mi
```

<222> 170'...172
<223> n= a, c, g or t

217

```
< <u>-----</u>
<221 > mish feature
<228 m. a, s, g or t
<2211
<2210 mist_feature
<2220    .188    .. 1880
<2230    n= a, c, g or t</pre>
< 2 2 0 :-
<221: misu_feature
k2225 -190;..,190
<223> n= a, c, g or t
<220 h
<221> misc_feature
k222> (192)...(192)
<223 h= a, c, g or t
4:220±
<221> misc_feature
\langle (222) \rangle = \langle (198)^{\overline{1}} \dots \langle (198)^{\overline{1}} \rangle
\langle (223) \rangle = (n = a) = (a) = (a) = (b)
.4005 102
agaaatggca aacttootot aaaacttgoo acacaaagat tatttttoot tototgtotg
                                                                                     60
caectgagat eteacaetea attitateeat tyetgaaate tytggeaaag etaceeetga
                                                                                     120
                                                                                     180
regagagatt ceatetennn nnnnnnnnn nnnngteant titaaaagget ancateeaag
                                                                                      217
anttgggngn gnatgtgngc atgtttatat ttagaag
.210> 103
4211> 667
4212> DNA
4213> Homo sapien
+: 22 3 s+
%221> misc_feature
R2228 ... 231 ... (542)
k223 s na a, b, g or t
k400% 103
                                                                                      50
acadaaaago gtattgtggg ggagaaango cagcaaaagg aacacagaga aagatottaa
agitticactg ctmaugggat trattacata acacggodac cttttgccag ccagaccasa
                                                                                     120
                                                                                      180
organagago antiggotigta titootiganag tagontitotig tooggoogan athatiggtant.
```

```
gagatttaaa laagattttii talaaggagii jaatggtiaa aagnoagiit niiniiniinii
                                                                    14.
                                                                    300
360
STREETERAND CONCERNACION CONCERNACION CONCERNACION CONCERNACION CONCERNACION
                                                                   -i2.
annannana manananna annananan annananan bahananana annananan
                                                                   480
                                                                   540
SERENDERE ERRESEREN ERRESEREN BESTERENERE ERRESEREN ERRESERE
                                                                   600
innotteetet aaaaettgee acacaaagat tattttteet tetelytetg casetgagat.
stoacactea attitutesat tgetgaaate tgtggcaaag staccestga tegagagatt
                                                                   660
                                                                   557
ccatctc
<2105 104
<211. 451
<212> DNA <213> Homo sapien
<400: 104
ataakattot agaaataaat tytttaatat aaaatacact aatatataat aatytattac
                                                                   60
staadatatg attatatata actataatgt gladigittt adatatatat tiddaaagta
                                                                    120
tactataaat geacticege actitigetet titttaetaaa tatatettigg aaateateet
                                                                    180
                                                                   240
ttattogtad ataaaaagdt toatagttod titttatggo tgoaaaaatgt todagdttat
agatagactg attatetate gageascatt augustigtigt ectatititae tatteetaat
                                                                   300
                                                                   360
"ttgctgaag tgaatticit ttgccatgtg atttccacag gtgtatatat gtagcgtaat
tagtactagt agaaagtaga attgctagat caaagagtat gtgccttgta attttgatga
                                                                   420
                                                                   451
tattgtgaaa totottooac agaagttgtt g
42105 105
<211> 852
<212: DNA
<213: Home sapien</pre>
42205
<221% misc_feature
k2224 (557<sup>7</sup>...557)
k223 \times n = a, c, g or t
42201
<223> n= a, c, g or t
```

```
<400> 101
gaunggagto toaggt hagg aant goagto at hioriting ortgepittina goathioori
contiguaat of autoutat orgoaggint titabacott abgutoacci biggitgiat
                                                                    120
agalagt ogst listnisacsyt islaat olaali otinsagsgab agaagtagaa islaastaaaa
                                                                    160
caraagitag gotoratgot agrosagaan boayttitto tiggiotgoa gaigagggga.
                                                                   240
tigut dagbat (dotaa dotigu tot obggida (baggatiggbig tot obototiggig tigtiggot bad)
                                                                   300
                                                                   360
gagostessa tettagaatu ttotaggago ogggaagtgt goaagstota gagosstast
coggaettgt rgaatotgaa tgtgttagtg olggggotea ggaeotgtga taggaaagto
                                                                   420
                                                                   480
acagaaagca tagatetgte tgaagaaact getgeageet eeatteattt etteetteat
cttccaggcc atgacttcga actttgttag gatccaacct gcagggagat ttcatgtcag
                                                                   540
ttdagtdada dadadantda docadtagda togotgtato daatatetto tetggatgto
                                                                   600
aggagagete tgtgetggeg etcaaggace teagggteta gitgaaggaa tgaagtgtge
                                                                   660
                                                                   720
tcatattaaa agaaaagtag caatgcaaag caaagaaggo caagtgcaaa tgtgcagtgt
aaacttgatt ttaagggagg ggagaggett tggeettgge caggateeca aggaaggage
                                                                   780
                                                                   840
tgaagacatg gaattggagg cagtgagaaa ggtggtcttt neagagggag cagtgttgac
                                                                    852
maggreectg ta
<210: 106
k2115 456
<212 = DNA
<213> Homo sapien
<223> n= a, c, g or t
<430> 106
taggttaett tetetaetaa tagtetiide agaaatetti eatatiidat ggggttatti.
                                                                    60
120
nnnnnnnnn actgeatttt aggaaggtga gaatttagag aagagaacae eaettggaat
                                                                   180
contigotitag oggitgaatgi gaaagtagad alagiggilli coottitood aagtgabigg
                                                                   240
grottactic aagtaaatta gacattioot ggagatoagg ggttgtgtat titoactiot
                                                                   300
otatataged atagtactot thaagagtto actaactacg tgttaaatgg gaactcatga
                                                                   360
tggttaacaa tagotcagtg gagatgttot acagttattt catacatgot actttgaagt
                                                                   420
```

45. agetragett attitigtgda gigagigtat gigura 107 6212 - DNA 213 - Homo supien :22.1 <221 misi feature :222. .393 ...3931 n= a, c, g or t :223 k4005 107 lacagaacgt catagggagt agtgcaccat ctgggataca aaacaaggto ctaagctagg 60 120 littg:ggatc acaacggatg aatccaggat ctagtticta gtgatacaag agagggactt ggttatgaat aactagataa aatottagtg ootgaaacta ggtcacaata teagagcagg 180 atcagcagaa tgactgatoo tactgagcag ataagctaco agtotgaggo ttotaaaaaat 240 tectroagta tagagoacca goccaggood tgaggocaag ataagattoo aggtggaact 300 teat@gttee aggtggeeaa agggetggag ggetttgeet gaaaagatea etgeagatag 360 tattigagaa aattactcaa aaccagoott ggntatatot taggcaagaa ggaaagtatt 420 ttaaaagact ttgtgaattt gtttcagttc acttgttttt tgtggagtac attttactca 480 501 totgafacas daasttcata g 4210: 108 4211: 377
4212% DNA
4213% Homo sapien 4.220b <221> misc_feature R2228 (317³)...(317 <223: n= a, c, g or t 4:220 h s2239 n= a, c, g or t 4.220b . 2200 <221> misc feature

```
-111
:221
      misc_feature
:222: 369<sup>-</sup>...369
32230 no a, b, g or t
. 220.
:221
      misc_feature .374:...374:
<222.
<2230 n= a, c, g or t
44000 108
long goong goongstoot taaaatanga ganaatanat ongniggang gangoonaaa
                                                                       60
Agtiquattig ottiggicasa gasatgitti tittagitigoo ototatagag actigiaccaa
                                                                       120
                                                                       180
ttaamagaat aggagtottg otgoatggga tattgttaag acttggtggg cotttgttaa
tataagagaa aattggtggc cittcagaat ttaagtagta tittitgtaga tacatatita
                                                                       240
                                                                       300
agagigatit tigigigiga acigittätt tittigicatt tättötatit gattgiggit.
tatefeating attiguangua etettingeet tentititett negatetigae aaannittite
                                                                       377
ttttratgng gainted
1210/ 109
:211> 884
<212: DNA
<213: Homo sapien</pre>
4220:
<221> misd_feature
.k2225 ....108<sup>7</sup>...(108)
x223> n= a, c, g or t
+:2205+
<221> misc_feature
-c2235+
<221> misc_feature
K2225 - 3001...3001
<223 \times n= a, c, g or t
<400> 109
aactgaggto dagaggagot tgggtgoott goodgaggto acadagottg tgagtgotgg
tiggagotga ggaaacgiga gaaaattgit giicccaago tgigaagnig ccacaigggs
                                                                      120
```

```
goragatawa attattotto finointttawy agatagygto hodannatowi boaggitgta
                                                                       1 = 0
gtadagtiggo gcaatbatigg ribabigona oribbiaabio otgggottaa gggatbotibo
                                                                       240
cappinages testgaqtad stqqqtetas aqqqqaqtqc caspatqqtq qqstaattin
                                                                       300
taaaagttti tattiircat agagattggg stilgcratt tigcccaggc iggtotigaa.
                                                                       360
ctogtgggut gaagbaatud ggotobytoa abbtosbaaa goodtgggat tabaggogtg.
                                                                       420
agocactgtg cotggootgt totitaaaaat atgagataat atatotgttg gatggatgoo
                                                                       480
taaaagtgga attgcttggt caaagaaatg tttitttagt tgccctbiat agagacigta.
                                                                       540
                                                                       600
ccaaltaana gaalaggagt offgotgoat gggalattgt taagacttgg tgggoofftg
ttaatataag agaaaattgg tggcctttca gaatttaagt agtatttttg tagatacata
                                                                       660
tittaagagtg attittigtigt gigaactgit tättittitigt cattitatiot attigattgi
                                                                       720
ggtttatoto attgattgta ggagetettt geetteattt tattaegata tgacaaaaat
                                                                       780
tttottttoa taggatatoa ttgttttttgg tattttttto coccatatgg tgtottottt
                                                                       840
tottaaaaaa aaatootogt googaatgta togtogaggo cagt
                                                                       884
<210> 110
42115 471
(212> DNA
:213> Homo sapien
<4005 110
                                                                        60
agticoating tgagtgaaag gicattatgt ggtatatgac tatatttoca ggotgggttg
agggagaggt acacagggat tottgggtta agaaatottt atattotoat ottotottaa
                                                                       120
aagoraagag cootgtagga taattttoat agaaccagtg gtotcaggot coagactota
                                                                       180
datactitaa atactataat aattiattat atgeaaaaat aaceeteatt taactitage
                                                                       240
taatttataa agcagtoota goaattoato tittgitggi agciatatat agggaatgoo
                                                                       300
titigi caaaa ggaaaattac tigiggigi co cagcataacc aaggcattiig alcaciigi gi
                                                                       360
                                                                       420
tragtagiga tittagagig algrigtrig alaaggigar tigalittitta olittaagtri
ngtitaotai galaataada gitaalatii altaittita olagalatig t
                                                                       477
```

^{42105 111}

^{.211&}gt; 233 .212> DNA

DNA

k213> Homo sapien

^{4220&}gt;

<221> misc_feature

<222> 961...121

 $-6223 \star$ me a, t, g of t

(400) - 111 Hatabagggg ogatgaagss agstotogst asatabatts totastaaat attbaasaga	4.1
attgaatgtt cartgatgtg ttagagttga aggtgnnnnn nnnnnnnnnn	11.0
ngraagatat gtoraagtat gratggutgu tutotataat gtgtatgttg agtataudtr	180
nautatongi gungggggta gaabtaabng tittgggbba bittatugag tit	233
<pre>32100 112 42110 771 52120 DNA 42130 Homo sapien 42200 42210 misc_feature 42210 1342111(410) 42230 ns a, c, g or t</pre>	
<400> 112 ttaaggcaat aaaagcatta tttgggataa ataaggtaat taggtaatga taaaaagaac	60
taagtaggaa gatagtaaca atttcaaact totactcagt toataaaata goottaattt	120
ttaamagcac amettgacaa ametgtamga mettttemam tgtacmacam aggtggmaga	180
adttaatatt tittotoaata attgatagat daggaagada aaataaaagt aagtaaataa	240
ntatotgaat agagttaaca agoracotaa tacaaacata aataattati cagcacatti	300
tagggageat tgtetatgat etagaeaett etetaateae thhhhhhhhhh hhhhhhhhhh	360
nnnnnnnnn nnnnnnnnn nnnnnnnnnn nnnnnnnn	420
caatsagtaa cigataaata taigataige taaaiggiga aaaaigecai gaagaaaaai	480
aaagcagatt aaaggaggta aggagatgca aaatggtagg gaggagggtt gctattttac	540
atattoagtg atoagggatg ottaactoat aagattatat tigaggagag accigaaaga	600
agtasagggt gagccatgtg agaagaatgt occaggcaga aggaacagca gttaaaaago	660
octgatgcaa gaatgtgctt ggcctatttg agaaacagca agactagttt gcctggagta	÷ 2. 0
gagtgaggaa rggggaaagt tgaagaagah ghtaccaggg aaratgogga g	., ., .
k210> 113	
<pre></pre>	
<pre><213> Homo sapien</pre>	
<400> 113	
ogitaaciga icaiccaaat acaatcciaa agatabatca gaagcibtat titiggiacaa	60

-3

```
agt zatuaga (atraaaaott) tittaannat (toabattagg) tätraaragt (äätigittga
                                                                      120
datantitita tutudattin ottasastua grottitauti atastaadag aatgoagaag
                                                                       100
                                                                      240
augitatagg assaugasto tipacigass chaqistisi sissotigs attagaigit
taaaaaaatti tatagottiga tataaaatga giilgaaaatti attatttaat aggaagdago
attagattit igtoabolgo toloagabaa tallitolagi olalgtatgi tallitaatti.
                                                                      360
tracactitg geneatigst tastificatt aaggaatica tcaaatgcaa tgaaattiga
                                                                      420
                                                                      453
ataaaattga toatagcaat aaataatttt taa
<210» 114
<211> 810
<212> DNA
<213> Homo sapien
<400> 114
caagaatoat aacataaagg gattoatgot tagaaaaaat ocataaacto cottotaaat
                                                                       60
attgagacac tocaggette titteagacaa ataactteta attatteeat attitteaag
                                                                      120
ttattaacca agataaagaa tototcagtt agtggggaaa atgaaaatta ttaagaatag
                                                                      180
aattqtotto tgactttaaa aacaatttag actttaaaac atgaacgttt actcaggotg
                                                                      240
gigatactor agitgitagi ataccatact igaagatato atcaagatca ciatagitgi
                                                                      300
atatatioto tattittata igiaaaigit aaoitagiio aagtattiit gottgialog
                                                                      360
ttaactgatc atcaaataca atcotaaaga tatatcagaa gotttatttt ggtacaaagt
                                                                      420
dataagaato aaaacttttt taaccattoa cattaggtat caacagtaat tgtttgagat
                                                                      480
actititatat caattotytt acaptgagoo titagicata otaagagaat goagaagaag
                                                                      540
                                                                      600
ttataggaaa argaatette aetgaaarta gtattatata atettgaatt agatgtttaa
hadaactitat agcitgatat aaaatgagit gaaaattatt atttaatagg aagcagcatt
                                                                      660
                                                                      723
agatttttgt cacctgtttt cagataatat tictagtcta tgtatgttat ttaattttta
captitigged cattigittat titteettaag gaatteatea aatgeaatga aattigaata
                                                                      780
                                                                      810
aaattgatca tagcaataaa taatttitaa
4210> 115
42115
      155
      ID E
DNA
4212 s
<213 - Homo sapien
<400> 115
stotaactot aqqaqtaaca qoodotoota acatotqoto ttoctatqtq ctttaqaqtt
```

ototolgor altagoraan oo toat	tan tomastoron matualopaaa tagagtogat 🥟 11.
aantorittan agtaauptat opprigst	gat artgt 188
<pre><2118 116 <2110 160 <2110 DNA <213 Home sapien</pre>	
(400) 116	
stotaastot aggagtaasa googoto	uta adatotgoto teodeatgeg deteagaget 60
otototgott attagodaat tootoat	tad tocaalicono catcaccada tagagttgat — 120
aactotttac agtaaactat cootgit	gat attgtaaaag 160
<pre><210> 117 <211> 553 <212> DNA <213> Homo sapien</pre>	
<400> 117	
accardiced geodetette tettaat	tta aatgittict teageaaaca gtateetagg 60
agcattgoto atatgggcog gaatgto	ctg getgeceate gaggetgtet gtagatacce
tttgcctgct tcagtgccaa gtgaaca	tog cagagaticug cottiguiguet costigoacco — 180
rtggdtgcag gggagetest gstgest	oot olygagolgg tyygygoolo actyccalce 240
tggateeet teetgeegte ageetge	tgt deteagtigea otgggaggag ggggtgeget 300
gtggttgtgt tgageettea taggtgt	oct otggtgggot tagaatgggg gttottaatc 360
coccedagta tgtggataga attcagg	ggt otgtgaacat ggatgaggaa aaaataacat — 420
tattatttat tactaatgta gotaaaa	tat gtagtgtgas sittgattat aaatgtagas — 480
aataaacete acageattag aaaggee	tgt gastacceas ataasaaasa agsasattgt — 540
tgtccctgaa ccc	553
<210> 116 <211> 593 <212> DNA <213: Homo sapien	
<400> 118 accacgioug godoctotto tottuat	tta aatgittitui toagoaaaca giatootagg — 60
	ntg gotgoodato gaggotgtot ghagatacko — 120
	tog pagagatong portigignon pootgoappo 180
stggetgeag gggagetest getgest	oot otggagetgg tgggggeete actgecates 240

tiggar comit congoogic	adrosty my	t ist sagt gil	aut gggagga	33344,8585	:
tataattata ttaaachto	ataggtgtii	. utaataaaa	ttagaatggg	ggttettaat	3 41.0
coccoccagt atgtggutag	aattoagggg	totgtgaasa	tggatgagga	aaaaataaca	421
ttathattta ttashaqigi	agriaaaata	tgtagtgtga	nnttigatta	taaatgtaga	4 = 1
paataaacot papagoatta	gaaaygaatig	tgastanssa	cataacaaac	aagcacatyt	540
agtrootgaa oosaaaaaaa	aaaaaaaaaa	aaaagatott	taattaagog	gto	593
<2108 119 <2112 94 <212: DNA <213: Homo sapien					
k400: 119 ttaaaatttt taaaaaata	aaaagaaaat	otigigacti	tatecccagt	ggaaatcaca	60
ggtatttcat atgaagttat					94
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					
<210> 120 <211> 82 <212> DNA <213> Homo sapien					
<400: 120 gaaawaagoo attotgoaac	atdaaadtgo	aaaqtactaa	tataacaact	acadcaadtt	60
atcasgaata totaactaag			, , , , , , , , , , , , , , , , , , ,	. 2 2	62
<210: 121 <211: 431 <212: DNA <213: Homo sapien					
:400> 121					
gcagtgttca ggacaggggg					60
ggggtggccc tgagcagtcc	caastgccas	cageccagag	ggcacatcaa	taccagtgat	120
Aaaaagcate tteeteeteg	cttcatgaga	ggggat ggag	tggactcagc	teccaccaag	180
nocaccacco aagetggcat	cat:ggccag	ggbabaabbb	abgtagetet	cagcagtggc	240
netgggetga tidettgetgg	acaggatagg	dtaaggttgg	taaaggaaaa	gggaagggag	300
haccaggtaa daatoocata	agcagggtac	cacgegaets	atcacaacag	aggcaaaaagg	360
otgtcatggg ggcatctgat	toogaattga	cotgtttota	atggetteeg	tgtttddttt	420
attitopago a					431

```
<400 - 122
agaicaasann taagaatnag bitontoito intoattabt intogratggg tigttggotot
abilitationa totagetagg ragionility clittiating aligitiati gatgaballi
                                                                    120
                                                                    180
godatitegta guaatageaa tagaatdato tatatatetig tegodetegti gaatgiagaa
aaaggatagt ggbattitust aastsgigtaa coctataaca coitigaoggg ggastacagt.
                                                                    240
toatalgoig gaccittigt gritgitmul gqiyliqtəgg fitgoittaal aluctiagda
                                                                    300
sattytuota attgodatos tittggggag ggstatatat scaagetaat atggtagsat
                                                                    360
ttttgtttta acatagaget gacceaaggt agaegtaagt gttgttcatt ttogeetaat
                                                                    420
actaataaaa ttacctaatt gttgaagett ggagettgaa tetaggeatt ttatgteatt
                                                                    480
                                                                    540
toaagtacac octagtattt taaagcataa atatootact atootcaaca actttagaac
aaaaataaat attttaacaa gaaaaaagca tgccatgaca agctgtaact taataaagaa
                                                                    500
agacaaggaa tygtototat agacogagaa aaaataggto otcagatata titatagcaa
                                                                    660
                                                                    720
aggasagtta ggaagttaaa aaacagtgga chocccooo cogccaaaaa ctcacaacct
                                                                    750
atatattggt tatcacaago tgttttagtg
<2105 123
~211: 55
4212: DNA
<213: Homo sapien
44005 123
ctaatageet getgttgant gaaageetta higatageaa aaccagiiga tiaac
<2109 124
<2115 450
<212 > DNA
<213 - Homo sapien
:220%
12235 n= a, c, g or t
4:220th
k221> misc_feature
k2225 (384)...386)
%223% n= a, c, g or t
```

<2205

77

```
<001+ misc_feature</pre>
\langle 4242 \rangle = 364^{\circ} , 366 , 3223 \rangle = 100 at (323)
. . . . . .
while misc_feature
HDDD - 1396 I. 396
\times 223 \times n = a, \sigma, g or t
4.220H
<221: misc_feature
<2225 (398/...398)</pre>
<023: n= a, c, g or t
< 220th
<221> misc_feature
<222> (405)..(405)
\langle 223 \rangle n= a, c, g or t
<400: 124
taattattig catgaaataa atcatcagtt gaaacttast atattaaaaa acataaaaaat
                                                                             50
laagooottiti titaasasasa oolagigootti galaalaacigg ottigoolaalat toalaaliggo
                                                                            120
agaattaata agaatgagtag ctaagcattt tatttgcaat tgtatctttg catttatttt
                                                                            180
tagageataa tegagaaata tatttattga tiootaaagg aaatgittac titootitat
                                                                            240
stagiaatta eggaaacaaa tigootggio acalitigaaa laaatgaato amattigagi
                                                                            300
caatgigtta tagataacta aagttacatg attgcaattt attcacagag tgttttttta
                                                                            360
aaaaaaatcat tgaagtgact ggannnaatg tacttnantg aaatnttaaa aaatggagaa
                                                                            420
                                                                            450
gagtotoago atgaagtgot gaaggottot
<210> 125
k2115 398
:2125 DNA
<213> Homo sapien
4400> 125
                                                                            60
grottotage tecoggaeet gagegitett godfigottt otototttoc totoalita:
gotatticig gogigicato aciggotias scattatgia agottiaagi gaaddaica
                                                                            120
gatgitatit teatgagete tgagggeact tetgeatitig tichicatitig accelletga-
                                                                            180
agostggaga tgsasaggaa ggsagtttss astgsagatg agsagsatgg aggaggsttt
                                                                            240
tggaagtgaa atgaattgto caaggtocag aggtgaggag otgggaccag gootcacagg
                                                                            300
attatightat gragitaarigt acaghaaarig githtatigata habaaaggig grigoottata
                                                                            360
```

```
proportions aansaaska ta agaaggo igaargu
                                                                         3.3.5
<2010 - 126
:211: 65a
.212 · DNA
k2130 Homo sapien
4400 - 126
patikitatig tigatgggaa algababbaa atgibattib aggaataaat aabbatggba
                                                                          50
gttoraaaaa ottqqcacaa atatatqaqt tqeqotqaqa otqqqqtaqo tobatoottt
                                                                         120
atoratiggag attiggoaagt yacaartoot gotooggoto ottugtigeat toodottatt
                                                                         180
gigaggaage gagagggee electgietg tgleeceatg colglgicae tgeclotett
                                                                         240
                                                                         300
ttpaccage gigitgicit clagetooog gacetgageg tietigeett getitetete
titionictea titatgetat ticiggegig teateacigg ettaceeatt atgtaagett
                                                                         360
                                                                         420
taagtgaaaa aatcagatgt tattttcatg agototgagg gcacttotgo atttgttoto
attitgactot totgaagoot ggagatgoac aggaaggoag tittocactgo agatgagoag
                                                                         480
catgraggag gotttiggaa gigaaatgaa tigiccaaggg tocagaggig aggagotggg
                                                                         540
accapacete acagactist gittatgiggt soig: :cogt cootggitte tystetatee
                                                                         500
aggtygtged tictagites ticstaassa asaagigigg gagqsigggi giggitgs:
                                                                         658
<2105 127
:211> 430
<212>-\text{DNA}
<213> Homo sapien
4:220±
42225
:223: n= a, c, g or t
:2205
(221): misc_feature
(222): (1521...(1521...)
(223): n a, c, g or t
42205
<221> misc_feature
<222> (167)...167)
<2239 n. a, c, g or t
4.2200×
\langle .223 \rangle n= a, c, g or t
```

```
< 1111>
k2210 mish feature
<2228 183 .. 163</pre>
\times 223 \times  n a, c, g is t
4220 F
<223: n= a, c, g or t
:220.-
<223> n= a, c, g or t
-:220:-
<:221> misc_feature
H2225 (243)...(243)
+:223 h = a, c, g or t
+:220b
:221> misc_feature
:222> (283\...283)
.223> n=a, c, g or t
+.220±
.221> misc_feature
+.222 \times -... \times (296)^{-1} ... \times (296)^{-1} \times (223)^{-1} = a, c, g or t
4.220s
<221> misc_feature
7.222> (315)...(315)
\sim 223 \times n = a, \sigma, g or t
.400% 127
dagaaaatat litggccagaa gaaataaagt atgatootaa tagaatooag aagogtaago
                                                                            €0
Atagoantaa atgatgooot taggootgat ottoaagooa gtoatantgt ataaogtaag
                                                                            :00
attigagoog gigtoggiat ontoagasat gnaggaggaa gigatinaas natgaasagi
                                                                            180
                                                                            240
tymaaagtgg cagengitag gacaacccaa attgittitic caagagaaaa caateeacac
nthaaaaaaa aaattgggod stitttettit tiglootggo tintgtotig godaentigg
coacatagtg tiginigita aatataataa aacitoattag ggcagicott cattaaaaaat
                                                                            360
ggcatraget stagaaasts astatttaag sttaaaggas tasatattsa tgatagagts
                                                                            420
```

80

```
430
gagatgoorg
< 211> 128
<111> 113
CILIES DNA
<213 - Homo sapien
.400 - 126
tarawaaraa aaatgatrag tgagaagota ggtggogtca aatgoooggg caaaaaagggg
traggreige agegetatae teagatgiaa ettaeagatg caactagegg aaa
                                                                      113
:210 - 129
1211.4 689
:212 - DNA
<213> Homo sapien
-:400: 129
Racaactota gaaggtgoot gtoacacogt titigtatgaa aggtgootoo tagagtatag
                                                                       60
Stgtacagta gastcatttt tgatataaga agggataaag casacttgas agatgatats
                                                                      120
aaaatgtaaa agaaaagaag tgtotgttit agaaggaago tgtatgagat aataggocaa.
                                                                      180
igttägggtg gtggtagssa tggtggtaaa aataggatca ettaatetag attaettaat
                                                                      240
ragtaagitg attocagggg coagtgggaa ttgotgaaag tttcatotga atacatggaa
ttittagcag tgattagggg aatggtgolg glattlatag coalgaactt attacttgaa
                                                                      360
agcatoctag ggacocaagt ottaatcaag gggcagttot tocaagtagt ggttgaggaa
                                                                      420
gtigggtatg ctttccaaaa cttctttcct cactaaagat tgcagatata ctctgtaagt
                                                                      480
gaottoacag aatatactoa attigicatai titaattiao aigittoito igaitalaggi
                                                                      540
toccacgiga tialaagilo iqaqarcaag ggreatetti gigggggigi gigigigear
                                                                      600
"taaaatttt tatgtgctgg taatagttat citgtggata titaagaaat aggaatgtgt
                                                                      660
godatatttt aaatacacct tatatgcaa
                                                                      689
42109 130
42:14 1901
ADIDS DNA
<213> Home sapien
4.2200b
LDD1= misc_feature
<222> (1582)...1837
:223 = n = a, c, g or t
k400> 130
tottttaaab tgtotttabo ttgotbocat taatattoab atttaaddta abodotttba
```

taaaaa mato	aprigaataan	100000000000000000000000000000000000000	11195 1111	ragistbatt	mudauuatii.	# 7 = #0 :
at agagritus	ásair ar tigti	eeen in an ain.	ggmat mitg	orranan god	riiraaarii	: ÷ .
atgranatit	potiniapaga	ataggaattg	ititiggiat	tgitulutat	on intotopa	241
agtacctagt	радовалого	coat gggtgc	tuagtaaata	utgaat jatt	atasttaacc	300
todottoata	gotoaganta	ttosatgaac	aatttatgga	cataaaaaato	tatgooagta	360
gadatttaag	gatattttt	atggtgacta	tggaaattgc	stggttasaa	atttatatat	· : 2 0
agagtsagta	acattgataa	aaacataaca	aattastgtt	tcatggaact	catgaogcat	480
taagaggett	atttagttit	gtttagatas	aaggtagtgt	sttosaaaac	attgttactt	540
caaaattttt	gtagetgete	cagttgaaca	ctatattaaa	atgcacattt	ttgaggacat	600
attettgaaa	ttaggaatgt	aatttttaag	aattaaacag	aggaccagaa	atagatotga	660
ggagtttatc	agagetgett	ccttgcacaa	ctctagaagg	tgcctgtcac	acctttttgt	720
atgaaaggtg	cctcctagag	tataactgta	cagtagactc	atttttgata	taagaaggga	780
taaagcacac	ttaadagatg	atatdaaaat	gtaaaagaaa	agaagtgtot	gttttagaag	840
gaagetgtat	gagataatag	gcaaaggtta	gggtggtggt	agcaatggtg	gtaaaaatag	900
gatcucttaa	totagattas	ttaatcagta	agttgattcc	aggggccagt	gggaattgct	360
gaaagtttca	totgaataca	rggaatttt	aguagtgatt	aggggaatgg	tgctggtatt	1020
tatagccatg	aacttattac	ttgaaagsat	cot agggaco	caagtottaa	tcaaggggca	1080
gticttccaa	gtagtggttg	aggaagttgg	gtatgottto	cassacttot	ttootoacta	1140
aagattgcag	atatactctg	taagtgactt	cacagaatat	actcaattgt	catattttaa	1200
tttacatgtt	tottotgatt	ataggtccca	cgtgattata	agttotgaga	tcaagggtca	1260
tatttgtggg	ggtgtgtgtg	tgcacttaaa	atttttatgt	gctggtaata	gttatottgt	1320
ggatatttaa	gaaataggaa	tgtgtgccat	attttaaata	caccttatat	gcaaaaattt	1380
taatgtaatt	taagtatato	gcaaaaaaata	aatagogggt	ggtattcaca	ctgcagagga	1440
tit ggcaagtic	tttttactat	acttcaaaca	attgttggca	gaaatcagaa	tcatgcactg	1500
tattgaataa	tttgaaacat	tagcatttaa	ctaatccaaa	gotaagataa	agagattttg	1860
aggtgaggtg	ataaatatat	gnnnnnnnn	nnnnnnn	nnnnnnnn	nnnnnnnnn	1620
	mmmmmmm		nnnnnnnn	nnnnnnnn		1680
nnnnnnnn			nnnnnnnn		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1740
					nnnnnnnn	1800
nnnnnnnn	nnnnnnnn	nnnnnnnnn	nnnnnnttt	aataggtata	ttttagatta	1860

atgattgaat ocatgataat ogaaccuatt gatatggagg g	19.00
<pre>kClis</pre>	
4400W 131	
gotogagtaa ggbattbaat aatgtotttt tgbttoogat totagotgta	
aaatetotta aattotoaga aciitoaatto attiatatgi aaagtgagga	gttdtacdat 120
attggtagut attaabatgt astgtastta tgaatbagto tgaaaatott	gotaaastgo 180
atattotgag ottitottaa trittititig ittiotogga aaogotgatt	ototaggtot 240
tggttggagt ccaggtatct gcaaattaaa taagcacttg aagtgatagt	atotgagtgt 300
regtaggeaa atgttaggag aactgaatea gatgttettt gaaagatttt	catggttcta 360
aaatgttotg atttaaaato cacaaagaaa aaaagcattg aaaatgaato	agcaaactag 420
atgtaattaa agette	436
<210> 132	
<2115 498 <2125 DNA	
<213 > Homo sapien	
4220%	
<pre><221> misc_feature</pre>	
.2225	
<pre><220> <221> misc feature</pre>	
<222> (488)488	
<223> n= a, c, g or t	
400 130	
<pre><400> 132 gaaaaaaagt ggaaacattt tittaaatca agatttaaaa aaaaattaca</pre>	tttgtgatag 60
gtagaaaaca atotgtoaca cactgotttt ggtagttgtg taagtttgta	daaddtadda 120
aaatgtaaat otgacagtat acatcaaago ottatgatgg toggcagtoo	
ctattotatg ttgtacaato aaggogtact atgatattta ttgcagaaca	
gratatacat tgotagttaa ttgattaaat aaagcatgat toottoaaaa	attgagtaat 300
atgasattaa aaascasaat ttsaaaastat atttaagaag atasaaataa	ttotttatta 360
thankeran katagagat akaketagan agnagkana agaadanag	nthantaath 400

```
castatigas gashattass sittionans sagiococot tutagasgas tigigotosta.
                                                                                                                                                                                - i - i
tottttumad agaaatga
                                                                                                                                                                                  400
<2110
                133
<211
                 422
colo. DNA
<213 = Homo sapien
:400x 133
tagangagga aatbagggot gottaggaat gttabataat gtattotgat tigagitaaa
                                                                                                                                                                                    60
taaaaaaato attafttgot catawatwaq atgaagaaac otgggaagat gaaatgtggo
                                                                                                                                                                                  120
tigagitgagi gggtaacigg atgaacgagi gattgagitg tcaactgiig gitagoggic
                                                                                                                                                                                  180
                                                                                                                                                                                  240
atggtgaaca cgaagggagg catctgggga tatgccatat agctctgttc ttggccagca
stigiaaaag asatititaaa saatgasata aatsaggisa tiggiggsas astiatsaaa
                                                                                                                                                                                  300
                                                                                                                                                                                  360
tatataaatg toocaaagot cagggggatg gtgaatgtaa gatgacagaa ttaacastts
scaattattt ccaaccaggo tagaatgaat asttagosaa agtocataaa ataacattoa
                                                                                                                                                                                 420
                                                                                                                                                                                  422
<210> 134
<211> 441
<2125 DNA
:213> Homo sapien
:220%
<221> misc_feature
(222) (307)...307)
42239 n= a, c, g or t
<400> 134
tagtacataa aactgaaatg goocaaaaaa catgaaaaga tgoocaactg titattotto
                                                                                                                                                                                    60
                                                                                                                                                                                  120
Agricticates statectate tossisticate against a taginal agricultural agricultural against again
rotacattaa attitgatti tgaattitig catottitoo ataaacttot titotacagi
                                                                                                                                                                                  180
gtittitaat teaaatgiae gigietteat etteletti titeteetgi agitteilit
                                                                                                                                                                                  240
attroggagtt attrtaatga aggrarraag gttortgggt aatotratge tggotgatat
                                                                                                                                                                                 300
tittittintaa cattitaatat aaaattitito ababataggo aaattitgaaa tgiiligbaat
                                                                                                                                                                                  360
gaaatttttt atacctgoca cotagotatt accatgaata tittagtata ottgotttat
                                                                                                                                                                                 400
radatatotg glocatitat o
                                                                                                                                                                                  441
```

4210> 135

<211> 499

<212 ·		. Bapitel					
.4							9.1
		aasatgosag	_				4 0
iddaat	asst	gataaattaa	aattoattaa	titaattota	ttaagtootg	ttagtootat	123
pattgt	geee	attgotgaca	caataccaaa	titacacagi	tgcagtgccs	godatgagtd	160
aagaaa	atgg	ggtotaatoo	tteetgeeac	ottagtatog	aattattetg	aaaaagaagt	240
ggatgt	actg	atagatggaa	agatogaaat	gattttttta	ggagagattt	tottgogoto	300
atgata	aaat.	aatuutgttg	gaatagatat	tgtatocatg	potoptoaag	tabagggtbb	360
caaagt	caag	gccagacagt	aagccaagtg	ctatagaaat	ttgtggtatg	ggtacaatta	420
gcaata	cata	ataaatttga	getettagga	tggttaaaga	atttgaggga	aaaaacttaa	480
aaccac	atat	taaaagcaa					499
<2108 <2119 <2129 <2139	701 DNA	o sapien					
4400H		atttccatat	aacdotadoo	ttgatattat	gggggagagg	atttotatoa	60
aagaag	aatg	attgttettt	actgagtaag	agaactacag	agaccaatgg	attcaagtag	120
tggaac	aget	ttaatatgta	acccatacct	gtaccaatgg	gtatiggite	totageteae	180
ctttag	getg	actagtatgc	ctatgctgga	tgttcaatcg	cgggattaga	cgggattgag	240
ctttat	ttag	tatototatt	agtcactatg	agetataate	ttttagcccc	tggatcatta	300
tgaagt	gcac	caagaataag	atacagtggt	toccaaggac	tggatatcat	agctaaccaa	360
ctcaga	tggc	taaaatacta	ttottgtatt	ttatacctag	tatttttggc	ttgctttata	420
atggga	gtag	tcattotggg	aatotgatot	totaaatgaa	agacaacttt	atgcctatat	480
tattto	tato	stgssaaaga	tatgtaccaa	acttgatttc	tggggtttct	gtgggattat	540
acattt	ttat	tggactttct	deceptitae	tgaagaagtg	attitictaa	aagacaccaa	600
teactt	tt.:	tettttatgt	agggaggatg	gtggtggtga	ggtgttsttt	gcaaggaggg	550
magana	atga	gatgaattgo	actgaactag	tgitaaagaa	·		

```
<400 - 137
ghabbaaacti aaangcoosa taataggaat taabonggta baabbaatatt givattitaa
taan magaba aaangababa gangaabanti baangabang agaagaband talaaabanti
                                                              - -
ttattataaa aantattiia atiggttaca ttatatgiog claigcoito agaglagaga
                                                              180
gaugtgacag titoaacaca aactgaaaaa titgiaagat aatggotgot attictaggo
                                                              241
stgtaaaaat toatttacss aaagaaaats atag
                                                              274
<210> 138
<211» 352
<2122 - DNA
:213) Homo sabien
:400> 138
                                                               60
gtaaaaacct aaatgcccaa taataggaat taaactggta aaataatatt gtcattttaa
taatcagata aaatgatata gatgaatatt caatgacacg agaagatatt tataaatatt
                                                              120
                                                              180
ttattataaa aactatttta attggttaca ttatatgtcg ctatgccttc agagtagaga
qaagtgacag tttcaacaca aactgaaaaa tttgtaagat aatggctgct atttctaggc
                                                              240
stigtaaaaat toatittacoo aaagaaaato atagiittiit tiittiitti iggagatigga
                                                              300
gittingotut tgitigoddag goiggagtan cinggongog accaegetaa go-
                                                              352
4210H 139
k2115 647
<212> DNA
<213> Homo sapien
+: 22 Co+
<221: misc_feature
<222> (319)...(552)
<223> n= a, c, g or t
<400> 139
acagatteat etgitataet egiatagatt gaaaetgate taetgitaag teaacaataa
                                                               60
cgaaggggag gacattgcag aaaactatga gaaggatctc aattttgcaa attatacatg
                                                              120
                                                              180
tatadacada tatodiadat diattoloty tyaydattiy titolyttaa taigiagato
aagttotagg cacagaaagt totagaagta totattaaca gttgggtttg agttaagtaa
                                                              240
ataasttast tistaassas attitisail gataigogit gigaattiit tatastiigi-
360
420
480
```

```
ERRETHEREN ERRETHEREN ERERERENEEN MELLERERENEE ELLELEEREN ERERERERE
                                                                       540
nnnnnnnnn nnaaslastg aasattaggt astatgatii tiotakavat kogagagtik
gagaaaaggo tiggatotta gaababbeto titgabagoo gggtgba
                                                                       4.4
<210> 140
<2118 334
<2129 DNA
<213+ Homo sapien
4:220H
:221: misc_feature
:2223: (44 ...,44)
(223) n= a, s, g or t
-:220:-
:221> misc_feature
:222> (214)..(214)
:223> n= a, c, g or t
4.220:-
-: 220:
<221: misc_feature
R222F (306)..(306)
42238 n= a, c, g or t
H220H
422CH
~221> misc_feature
.220%
.221> misc_feature
(2228 - (323^{-1}), (323^{-1}), (323^{-1}), (323^{-1})
4:2205
%223> n= a, c, g or t
```

```
tight a ragail (ratiggint) call at taaqaimig laatti ragttib (bttbbtatta) aagt rataan
trangigora mittiatgit allotggast tigggoagig igatilialia igistgio:
tocattgaag tgtcactaac tiligicaaaa ataccittca staattagag gigccagaat
                                                                             160
ttttatasto gotastoagg aattggtvas ttsmataats tgaattasta taasstiggt
                                                                            240
petettttea tgaabagett gagebactga baltotgttg tetaggtgat tabgtgaagn
                                                                            334
ttotangnta taatniggan achagicacc agic
<210> 141
<2115 990
<212: DNA
<213> Homo sapien
:220>
<221> misc_feature
(222) (105<sup>\tau</sup>...105)
<223> n= a, c, g or t
4.220×
\times 221 \times - misc\_feature
.222 \times (116^{\frac{1}{4}}...(117) \times 223 \times n = a, c, g or t
4:220×
%221: misc_feature
4.222: (132°...(132°
\langle 223 \rangle n= a, c, g or t
-:220s
R2218 misc_feature
H2225 (143)...143)
\times 223 \times n = a, c, g or t
R400> 141
ggeegatggg ggcatgeagt tigtottotg ggaactgott tocagotgtt tggetatgag
                                                                             60
                                                                            123
gaaaacgcag tocaatotot acagcatoto tigaagtita tgtchagtaa taaganngca
gragatgata anagtgtagr aanagragra raqagtttot toraangatt ggaartgggr
                                                                            1.80
gatatycaag cactiticact giggcaaaaa tilogggast tgagcatiga agagtacatt
                                                                            240
ogggtttaca agogtotggg agtatatitit gatgaatati baggagaatb attitatogt
gaaaaatoto aagaggtott aaagttgotg gagagtaaag gactootaot gaaaacaata
                                                                            360
aaaggaacgg ctgtagtaga totototggg aatggogaco cotootcaat ttgtactgta
                                                                            420
```

	480
at ggarmagt lataattttga tärmatgmis tätgtga mag minasaggasa säämasgrat	641
tit sagraag tattoosaat gotgaagans atgggatatg antgggoaga saggtgooag	411
cacgtgccct tiggagiagt aragggaatg aagactogaa gaggagatgi cactttrotg	660
gaagatgitt taaatgagat toaattaagg utgotacaga acatggotto aattaagagt	720
gaattoagtt tittottatt aaagtoataa oltaogtgoo aottittatgi tattotggao	780
tutgggdagt gtgatttatt atgtotgtod otfoattgaa gtgtoactaa otttgtoaaa	840
aatauutitto Actaattaga gytyööägää tittitatast systäeteäy yaattyytöä	900
ottoaataat otgaattaot ataaoottgg toototttto atgaacagot tgagccactg	960
acattetgtt gtetaggtga ttaegtgaag	990
- <210	
<pre><212> DNA </pre> <pre><213> Homo sapien</pre>	
-<400> 142 - ocaaaatoot atoattttaa caagtacaae tacoorattt pootoagaat gtageatigo	60
rtotggtttg otgtggatoo tgtattggas castcagetg tagagteetg tgggatocaa	120
getteaagga gasesatsat geatgittag ggssagitse aggigteett gasatgasas	180
getteaagga gasssatsat gsatgtttag ggesagttse aggtgtsett gasatgasas.	180 195
.aaacctcca tttcc <210> 143 <211> 57	
taaacotoca tttcc	
%210> 143 %211> 57 %212> PRT	
<pre>%210> 143 %211> 57 %212> PRT %213> Homo sapien %400> 143</pre>	
<pre>%210> 143 %211> 57 %212> PRT %213> Home sapien</pre>	
Madadotoca titod #210> 143 #211> 57 #212> PRT #213> Homo sapien #400> 143 Met Asn Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr 1 5 10 15	
Madadotoca titod <pre> <210> 143 <211> 57 <212> PRT <213> Homo sapien <400> 143 Met Asn Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr</pre>	
taaacctcca tttcc #210> 143 #211> 57 #212> PRT #213> Homo sapien #400> 143 Met Asn Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr 1 5 10 15 Ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Asn	
Met Ash Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr 1 5 15 Ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Ash 20 25 18 Ile Phe Leu Arg Ser 3lu 3lu 3lu Thr Val Thr Pro Tyr Tyr Thr	
<pre>Madectica titice <210> 143 6211> 57 6212> PRT 6213> Homo sapien <400> 143 Met Ash Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr 10 15 Ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Ash 20 25</pre> Ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Ash 20 25	
Met Ash Leu His Cys Ser Ser Met Thr Gly Pro Leu Ala Ser Lys Thr 1 5 15 Ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Ash 20 25 18 Ile Phe Leu Arg Ser 3lu 3lu 3lu Thr Val Thr Pro Tyr Tyr Thr	

<211> 144

-2012 - PAT -2013 - Homo sapien

<400> 044

Met Asn Leu His Cys Ser Ser Men Thr Gly Pro Leu Ala Ser Lys Thr

ser Glu Asp Leu Leu Ser Leu Glu Ser Lys Phe Leu Ser Leu Phe Asn 2.5

3lm lie Phe Leu Arg Ser Glu Glu Glu Thr Val Thr Pro Tyr Tyr Thr 35 40

Leu Gly Ser Gln Met Cys Asn Leu Ile 50 55

<210> 145

<211> 45 <212: PRT

:213: Homo sapien

44000 145

Met Arg Ser Ala Gly Ser Asp Phe Ser Leu Val Lys Trp Val Val Phe

Lys Leu Cys Arg Trp Thr Gly Asp Ile Phe Pro Leu Leu Leu His Glu

Glu Ile Cys Leu Asn Val Asp Arg Leu Glu Ile Phe Phe 35 40 45

:210> 146 :211> 30 :210> PRT :213> Homo sapien

.400> 146

Met Ser His Arg Ala Arg Pro Arg Trp Cys Val Phe Ser Arg Asn Lys 1 10 15

Tyr lle Leu Leu His His Arg Ile Thr Leu Ile Lys Val Gly 2.5

42105 147

H2119 85

+2122 PRT 11+3 Humb Bapten

.4... 14"

Bly Ala Val Leo Ala His Cys Ash Ser His Leo Pro Bly Ser Ser Asp

Ser Pro Ala Ser Val Ser Ala Val Ala Gly Ile Ash Gly Ala Ala His

His Thr Trp Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe His His 40

Val Gly Gln Asp Gly Ile Glu Leu Leu Thr Ser Asp Leu Pro Ala Ser 5.5

Ala Ser Gln Ser Ala Gly Ile Ile Gly Met Ser His Arg Ala Arg Pro

Arg Trp Cys Val Phe

<210> 148 <211> 47 <212> PRT

<213> Homo sapien

 $\pm 4000 \times -148$

Met Pro Lys Leu Leu Pro Gly Phe Gln Gly Asn Arg Ala Arg Trp Leu

Asn Gln Arg Ser Asp Ser Gln Ala Ala Arg Glu Lys Val Phe Asn Pro

Leu Ile Pro Val Cys Asn Arg Arg Asn Gln Gly Leu His Thr Leu 3.5 4.0

%210% 149
%211% 166
%212% PRT

<2135 Homo sapien

<400> 149

Met Leu Val Gly Arg Lys Arg Arg Arg Glu Ser Ser Val Lys Glu Asn

Thr Bly Met Blu Thr Let Bln Ary Let Arg Bln Lys His Pro Met Bly Li

Lys Ser Arg Arg Thr Ile Ser Cys Leu Trp Arg Thr 3ly Ser Arg 3lu 35 40

Gin Ser Thr Ser Pro Asp Thr Ser Leu Gly Ser Thr Thr Pro Ser Ser 51 60

His Thr Leu Glu Leu Mal Ala Leu Asp Ser Glu Mal Leu Arg Asp Ser 65

Leu Gln Cys Gln Asp His Leu Ser Pro Gly Val Ser Ser Leu Cys Asp 85 90 95

Asp Asp Pro Gly Ser Asn Lys Pro Leu Ser Ser Asn Leu Arg Arg Leu 100 105 110

Leu Glu Ala Gly Ser Leu Lys Leu Asp Ala Ala Ala Thr Ala Asm Gly 115 120 125

Arg Val Glu Ser Pro Val Asn Val Gly Ser Lys Pro Leu Leu Phe Pro 130 140

Ala Phe Pro Pro Arg Pro Ala Ala Gln Cys Ser Gly Gln Glu Val Gly 145 150 155

Arg Glu Ala Gly Thr Glu 165

<210> 150

<211> 352

<212> PRT

<213> Homo sapien

<400> 150

Pro Arg Asp Val Ser Arg Glm Glm Glm Ala Glm Glm Glm Lem Ser Glm 1 10 15

Gly Glu His Trp Tyr Gly Asn Ser Ser Glu Thr Pro Ser Glu Ala Ser

Tyr 3ly Glu Val Gln Glu Asn Tyr Lys Leu Ser Leu Glu Asp Arg Ile 35 40 45

- Him Blu Bln Ser Thr Ser Fri Asp Thr Ser Let Bly Der Thr Thr Pro-81 - 61
- Ser Ser His Thr Leu Glu Leu Val Ala Leu Asp Ser Glu Val Leu Arg 85 $_{\odot}$ MS $_{\odot}$
- Asp Ser Leu Gln Cys Gln Asp His Leu Ser Pro Gly Val Ser Ser Leu 88 90 95
- Cys Asp Asp Asp Pro Gly Ser Asn Lys Pro Leu Ser Ser Asn Leu Arg
- Arg Leu Leu Glu Ala Gly Ser Leu Lys Leu Asp Ala Ala Ala Thr Ala
- Ash Gly Arg Val Glu Ser Pro Val Ash Val Gly Ser Ash Leu Ser Phe 130 140
- Ser Pro Pro Ser His His Ala Gli Gli Leu Ser Val Leu Ala Arg Lys 145 150 156
- Leu Ala Glu Lys Gln Glu Gln Asn Asp Gln Tyr Thr Pro Ser Asn Arg 165 170 175
- Phe Ile Trp Asn 3ln Gly Lys Trp Leu Pro Asn Ser Thr Thr Cys 180 185 190
- Ser Leu Ser Pro Asp Ser Ala Ile Leu Lys Leu Lys Ala Ala Ash 195 200 205
- Ala Val Leu Gln Asp Lys Ser Leu Thr Arg Thr Glu Glu Thr Met Arg 210 216 220
- Phe Glu Ser Phe Ser Ser Pro Phe Ser Ser Gln Ser Ala Ser Ser Thr 225 232 235 240
- Leu Ala Ala Leu Ser Lys Lys Val Ser 3lu Arg Ser Leu Thr Pro 3ly 245 250 255
- 31m 31m His Pro Pro Pro Ala Ser Ser Phe Leu Ser Leu Ala ser Met 260 270
- Thr Ser Ser Ala Ala Leu Leu Lys 3lu Val Ala Ala Arg Ala Ala 3ly 205 285

Ber bed fed Ala Stu Tys ser Ser Led Deu Pro Blu Asy Pro Leu Pr 2.30 2...* Pro Pro Pro Ser Blu Lys Lys Fro Blu Lys Val Thr Pro Pro Pro Pro 325 330 335 Leu Leu Leu Pro Val Pro Lys Gly Arg Val Ser Lys Pro Ser Asm Ser 340 345 <210 > 151 <211 > 67 <212 > PRT <213 > Homo sapien <4000 151 Met Gly Tyr Gln Trp Tyr Arg Leu Arg Val Asn Ser Ile Ser Gly Phe His Gly Ser Leu Glu Gln His Leu Pro Val Ser Ser Ala Phe His Gln 25 Arg Trp Asp Leu Trp Ser Thr Gly Cys Leu Thr Pro Gly Ala Ile 3lu Lys Gly Glu Asp Leu Trp Lys Ala Phe Val Leu Ala Pro Val His Leu 5.0 5.5 Mal Leu Asn 65 <210> 150
<211> 50
<212> PRT
<213> Homo sapien k400> 152 Met Lys Glu Gly Val Leu Gly Ser Val The Arg Pro Lys Cys Pro Gln

3ly Pro Ser Gly Cys Leu Tyr Leu Leu Met Ser Pro His Thr Cys Trp

Bin Ser Trp Asy Lys Ser Leu Thr Leu Typ Val Thr Ser Asp Ser Pro ÷ .

Trp Lys Lys Glu 81

<211> 153 <211> 63 <212> PRT <213> Homo sapien

k4009 153

Met Arg Thr Glu Ile Ser Trp Ser Val His Glu Glu Glu Trp Ile Gln

Leu Leu Val Leu Ala Leu Cys Ser Leu Ash Ala Leu Tyr Phe Leu Leu 25

Phe Tyr Leu Thr Ile Phe Phe Trp Phe Ala Phe Thr Val Asn Asn Ile 4.0

The Ser Ser Phe Leu Ala Leu Ala The Leu Ala Asp Arg Lys Trp £0. 55

4210> 154

<211> 98

<212> PRT

<213> Homo sapien

<400> 154

Met Lys Asn Gln Pro Leu Gly Gly Leu Leu Leu Leu Gly Gln Ile

Phe Met Trp Pro Thr Arg Leu Cys Ala Ala 31n Leu Cys Leu Pro Ala

Ser Leu Val Leu His Thr Val Leu Ser Ile Val Ser Val Ala Trp Pro 40 3.5 4.5

Tyr Pro Ser Ser Cys Leu Pro Ile Leu Asn Tyr Ile Thr Cys Phe Leu 55

Ala Ser 3ly Pro Leu His Met Leu Phe Met Leu Leu 3ly Val Phe Cys

Ser Phe Leu His Pro Glm Pro Leu Pro Leu Asp Cys Thr Pro Glm Gly

e :

Arg Ser

<210 > 155

<400a 155

Met Val Tyr Thr Phe Ser Cys Phe Phe Ser Ser Phe Leu Glu Ser Gly

Asp Thr His Arg Arg Ile Asn Gly Ser Gly Lys Val Pro Gly Leu Met

His Glu Glu Asp Leu Val Arg Leu Glu Thr Cys Leu Ala Ser Gln Gly

Ser Ala Val Ser Tyr Pro Cys Ala Lys

4210: 156

<211> 89

√212> PRT

<213 > Homo sapien

<400> 156

Asp Thr 3lu Ser 3ly Trp Asp Asp Thr Ala Val Val Asm Asp Leu Ser

Ser Thr Ser Ser Gly Thr Glu Ser Gly Pro Gln Ser Pro Leu Thr Pro

Asp Gly Lys Arg Asm Pro Lys Gly Ile Lys Lys Ser Trp Gly Lys Ile 40

Arg Arg Thr 3lm Ser 3ly Asm Phe Tyr Thr Asp Thr Leu 3ly Met Ala

Glu The Arg Arg Gly Gly Leu Arg Ala Thr Ala Gly Pro Gly Leu Ser

Arg Thr Arg Asp Phe Lys Gly Gln Lys

```
<2135 Homo sagien
4400 - 157
Met Ser His Ser Pro Val Leu Pro Ala Pro Gln Ser Ser Val Gly Tyr
Pro Mal Arg Pro Ser Pro Cys Thr Pro The Phe Ser Leu Ile Glu Ile
Pro Ala Thr Cys Cys Leu Leu Pro Cys Arg Ile Thr Asn Ala Cys Pro
Val Fro Gly Ile Glu Ala Ala Ile Ala Gly Leu Leu Pro Cys Ser Arg
His
-55
:210:- 158
<211: 51
4:2125 PRT
<213: Homo sapien
44005 158
Met Val Ala Arg Ile Lys Ser Glu Lys Pro Gly Asn Ser Lys Leu Leu
Glu lle Leu Val Ile Leu Thr Arg Arg Val Glu Val Lys Val Met Lys
                             25
Tys Gly Lys Phe Trp Lys Pro Phe Glu Ser Lys Ala Glu Ser Ile Cys
                           40
dys Tyr lle
80
<2200
<221> MISC_FEATURE
```

<222> 33 .. 33

 $\times 223 + - \text{M}$ any amint abid

8400 + 1E9

Met Ala 3ly Leu Leu Ash Mal Thr The Ile Tyr Leu Leu Leu 3lu Cys

Leu Ser Leu Tyr Thr His Val Thr Cys Ser Ser Leu Pro Ser Ser Leu 20 25 30

Maa Leu Tyr Ile Tyr Tyr His Arg 3ly Leu Gly Lys Lys Thr Pro

Thr Ala Ala Pro His Thr His Pro Pro Ala Leu Tyr His Leu Leu Gly

Phe Val Phe Leu Cys Arg Ile His Asp Phe Leu Lys Tyr Asn Phe Phe -55

Asn Val Tyr Ile Leu Tyr Ala Phe Ser His Ser Tyr Val Lys Ser Gly

Arg His Arg Leu Val Phe Leu Phe Thr Val Asp Ala Ser Val Pro Lys 105

Ile Cys Ile Ala 115

%210% 160 %211% 81 %212% PRT

4213 > Homo sapien

+: 2 2 0 ±

.400> 160

Met 3lm Ash His His Ile Pro His Cys Ile Ala Val Ala Ser Trp Pro

Leu Ile Ash Cys Lys Lys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Val

```
Typ Tie Tys Tie His Val The Tie Typ Alk Typ Val Met Typ Met Ero
Thr Tyr Leu Dys Thr Dys Ash Val Tyr Ala Tyr Ile Dys Ile Tyr Lys 80 61
Gly lie 3in lie Cys lie Tyr Leu Arg Lys Thr lie Lys Asn Leu Cys
Ser
<210 > 161
<211 > 39
<212 > PRT
<213 > Homo sapien
<400> 161
Met His Thr Gln Val His Met Phe Thr Glu Ser Gln Val Gln Glu Arg
Ger Lys Glu Pro Lys Leu Glu Ala Thr His Met Phe Ile Ash Ser Arg
                   25
Asp Asp Lys Ile Tyr Leu Asp
<210> 160
<211> 40
<212> PRT
<213> Homo sapien
<400× 162
Met The Ala Ser 3ly Pro Pro Cys His Val Lys Ser Thr Leu Tyr Ser
Leu The Leu Glu Arg Thr Tyr Tyr Val Asn Leu Asp The His Met Val
             20
He Thr Leu Tyr Glu Ala Ash He
<213> Homo sapien
```

<400> 163

Met 31n Asn Ser Val Ser Thr 31n Arg Phe Asn Val Tyr Ser Phe Lys

31n Tle Ser Phe Asp Ser Leu 31u Tyr Phe Phe Leu Ash 11e Leu Ser 25 32

Pro Ser Met Glu Ser Cys Pro Lys Lys Ala Glu Arg Lys Glu Lys Lys 3.5

Lys Arg Lys Leu Asn Phe Leu Asn Ser Ile Ser His Cys Leu 3ly His

Val Cys Lys Trp Pro Thr Leu Pro Arg

<210> 164

<211> 37

:212: PRT

<213> Homo sapien

<4400F 164

Met Lys Cys Phe Asp Ile Trp Asn Phe Leu Pro Leu Phe His Phe Ala

Val Ash Gln Ser Glu Phe Arg Ser Ile Met Trp Ile Tyr Glu Ash Val

Ger Asn Gly Leu Phe 3.5

.210> 165

4.220b

%223 > X=any amino acid

4400> 165

Met Glm Ile Leu Trp Leu Leu Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa

21 11 11 11

Kaa Maa Maa Maa Maa Maa Maa Maa Maa Ser Ash Fro Arg Leu Sys 35 $$40^{\circ}$$

Leu Leu Val Ala Leu Lys Pro 50 55

<210> 166

<211: 48

<212 x PRT

:213: Homo sapien

4400> 166

Met Cys Ala Lys Val Leu Val Leu Ser Arg Lys Asp Thr Asp Glu Cys 1 $^{\circ}$ 10 $^{\circ}$ 15

Tyr Arg Leu Leu Lys Asn Ile Tyr Leu Asn Lys Tyr Val Lys Tyr Lys 20 25 30

Gly Ile Gln Tyr Ser Asn Arg Asn Ile Glu Ile Glu Gly Thr Ser Pro 35 48

<210> 167

<211> 95

<212> PRT

<213> Homo sapien

4400> 167

Met Cys Leu Phe Cys Ser His Ser Val Tyr Lys Pro Leu Tyr Glu Thr 1 5 13

Gly Ser Ser Gln Leu Phe Phe Tyr Ser Thr Leu Lys Ile Leu Val Ser 20 25 30

Phe Leu Val Ser Thr Val Ala Lys Ala Tyr Cys 3ln Phe Asp Tyr His 35 - 45

Ser Ile Ile 3in Ash Phe Phe Leu Tyr Leu Tyr Ser 3iu Phe 3in Ile 50 55 60

Phe Ser Leu Ser Leu Ile Ser Tyr Asp Phe Ile Ile Met Tyr Val Val 65 80

Val Asp Leu Ser Ile Leu Cys Tyr Ile Trp 3ln His Phe Leu Phe 85 90 95

```
+211/ 8/2
<211: PRT</pre>
+213: Humb sapien
.400: 168
Met Ash Ash Arg Trp Met Leu Pro Pro Phe Ser Pro Arg Arg Ash Lys
                                  10
Gly Lys Gly Glu Gly Lou Gly Gly Trp Ile Ser Arg Gln Thr Gly Glu
                                2.5
Cys Glu Gly Thr Ile Arg Arg Glu Val His Pro Glu Ile Arg Tyr Val
Ser Fro Leu Arg Phe Pro Thr Ile Asp Ser Glu Leu Leu Glu Ser Val
Ser Ser Ile Ser Asp Ala Val Gly Ser Ser Lys Ser Gly Lys Tyr Ser 65 70 75 80
Cys Thr Phe Val Pro Glu Ser Ser Asn
    85
<210> 169
<211> 42
<212> PRT
<213> Homo sapien
44005 169
Met Glu Ser Ser Leu Glu Thr Cys Ala Ser Ser Ash Pro Leu Arg Leu
lys Lys Thr Ser Phe Leu Ser Gln Glu Thr Pro Gly Arg Leu Phe Ile
            23
                     2.5
Leu Pro Thr Thr Trp Pro Ash Ala His Ash
k210% 170
k211% 132
k212% PRT
```

~213> Homo sapien

<400> 170

Met Bly Arg Arg Thr Arg Thr Val Arg Val Ser Arg Lett Fro Pro Ala

Thr His Ser Cys Ser Fr Pro Pro Die Tyr Ala Leu Ala Leu Pro Ala 20 - 21 - 21

Phe Trp Pro Ser Gly Ala Val Leu Val Pro Ala Leu Ala Gln Ala Cys 3.5

Phe Ser Ser Leu Pro Thr Asn Phe Leu Ser Ser Cys Gly Cys Ala Tyr

Leu Val Trp Val Trp Phe Trp Leu Leu Asn Glu Gin Arg Gln Asn Glu

Gly Ala Met Ser Thr Asp Glu Ala Phe Gly Lys Arg Pro Pro Ser Ile

Ala Leu Leu Glu Gly Ser Val Glu Ala Ala Val Phe Pro Gly Ala Gly

His Leu Asp Thr Val Pro Ala Cys Thr 3ln Pro Pro Ser Thr Leu Leu 115 120 125

His Gln Pro Ala 130

<210> 171 <211> 121 <212> PRT

<213> Homo sapien

k400> 171

Met Val Ser Cys Asn Tyr Gly Tyr Val Arg Val Gln Arg Arg Glu Ser

Cys Val Gly Trp Ser Gly Leu Glu Arg Leu Gly Thr Glu Leu Gly Val

3lu Leu Gly Trp Fro Ala Ala Glu Gly Ala Glu Met Gly Trp Gly Gly

Fro Ser Ser 3in Pro Pro 3ly Thr Phe Pro 3iu 3ly Pro Ala Val 3ly

Leu Cys Thr Arg Blu Ile Ala Ser Leu Phe Ard Thr Pro Ser Leu Fri

Ala Leu His Leu Fro Thr Bly Ala Leu Blu Bln Ala Arg Leu Bln Leu

Arg His Val Glin Pro Glin Thr Phe Ala Pro Ala Ser Fro Pro Arg Leu

Pro Arg Slu Leu Sly Lys Sly Leu Cys 115

<2108 172 <2119 107 <2129 PRT <2139 Homo sapien

<4000 172

Met Val Leu Pro Glm Asp Phe Leu Ala Glu Pro Gly Ile Leu Leu Thr

Leu Pro Ser His Gly Ash Met Ala Leu Ala Cys Trp Arg Leu Trp Ala 20 25 30

Pro Phe Leu Ala Ala Val Leu Pro Gly Val Ala Lys Asp Ser Ser Tyr

Pro Leu Pro Arg Ile Leu Val Ser Arg Leu Ser Leu Leu Val Thr Gly E- 0 5.5

Ser Glu Trp Asn Thr Val Gln Val Arg Glu Gly Thr Asn Arg Pro Cys

Phe Ash Ser Pro Cys Phe Pro Pro Val Pro Tyr Arg Pro Ser Leu Ser 90

Pro Gly Val Ser Ile Glu Asn Ser Ala Tyr Leu

k210% 173
k211% 107
k212% PRT
k213% Homo sapien

<400% 173

Met Val Leu Pro Glm Asp Phe Leu Ala Glu Pro Gly Ile Leu Leu Thr

- . 1.5 Lou Pro Ser His Nly Ash Met Ala Leu Ala Cys Trp Arg Leu Trp Ala 2.5 Pro Phe Leu Ala Ala Val Leu Pro Bly Val Ala Lys Asp Ser Ser Tyr Pro Leu Pro Arg Ile Leu Val Ser Arg Leu Ser Leu Leu Val Thr Gly Ser 3lu Trp Asn Thr Val din Val Arg 3lu 3ly Thr Asn Arg Pro Cys Phe Asn Ser Pro Cys Phe Pro Pro Val Pro Tyr Arg Pro Ser Leu Ser 85 90 95 Pro Gly Val Ser Ile Glu Asn Ser Ala Tyr Leu 100 105 <210> 174 <211> 65 <212> PRT <213> Homo sapien <400> 174 Met Val Trp Trp Ser Leu Gly Leu Thr Leu Thr Arg Glu Arg Asn Ala Asp Phe Ser Phe Thr Ile Pro Ser Gly Leu His Arg Tyr Pro Ser Lys Val Arg Arg Asp Phe Cys Cys Tyr Leu Ser Ser Cys Phe Ser Ala Glu 35 45 Ala Leu Thr Lys Ile Gln Ile Asn Ile Ser Gln Met Gly Ile Val Leu £ 0 60 Ile.55

<213> Homo sapien

4400 + 176

Met Mal Trp Trp Ser Leu Bly Lou Thr Leu Thr Arg Blu Arg Ash Ala

Asp Phe Ser Phe Thr 11e Pro Ser 3ly Leu His Ary Tyr Pro Ser Lys 23

Val Arg Arg Asp Phe Cys Cys Tyr Leu Ser Ser Cys Phe Ser Ala Glu $$35\$

Ala Leu Thr Lys 11# 31m Ile Asm 11e Ser 31m Met 31y Ile Val Leu

Ile

65

<210:- 176 :211: 92

:212:- PRT

<213: Homo sapien

:400b 176

Met Tyr Lys Arg Lys Val Tyr Pro Val Ser Ser Pro Leu Met Val Thr

Leu Glu Thr His Val Leu Lys Thr Arg Ser Gly Pro Gly Thr Ala Pro

Asp Pro Ala Phe Pro Ser Tyr Thr Ala His Phe Cys Leu Ser Thr His 3.5

Gly Gly Cys His Ser Ala Glu Met Pro Ala Gly Leu Thr Ser Thr Pro 55

Phe lle Ash Ash Ala Ala Pro Thr Ser Thr His Val Trp lle Ser Thr 11.5

His Leu Ser Ser Phe Leu Arg Ile Asp Phe Lys Met 85 9.0

210 177 *211* 114 *212* PRT

x213: Homo sapien

k400> 177

Ash Leu Tyr Ash Thr Thr Met Tyr Lys Arg Lys Val Tyr Fro Val Ser

Ser Pro Leu Met Val Thr Leu Glu Thr His Val Leu Lys Thr Arg Ser 3.5

Gly Pro Gly Thr Ala Pro Asp Pro Thr Phe Pro Ser Tyr Thr Ala His

Phe Cys Leu Ser Thr His Gly Gly Cys His Ser Ala Glu Met Pro Ala

Gly Leu Thr Ser Thr Pro Phe Ile Asn Asn Ala Ala Pro Thr Ser Thr

His Val Trp Ile Ser Thr His Leu Ser Ser Phe Leu Arg Ile Asp Phe

Lys Met

<2105 178 <2115 47 <2125 PRT <2135 Homo sapien

(400) 178

Met Glu Leu Pro Phe Cys Lys Gln Phe Ile Ser Asp Asp Ile Thr Thr

Fhe Leu Tyr Val Ser Leu Tyr Ile His Leu Ile Val Leu Leu Lys Trp

Phe Leu Lys Cys Ile His Arg Tyr Phe Gly Tyr Leu Gly Arg Gly 35 40 45

4210: 179 4211: 42 4212: PRT

w213: Homo sapien

44009 179

Met Ash Led Led Ile Led Ser Led Ser Ash Tyr Er Lyd Ash 31h Fhe Tal The Len Val Ile Ala Bly Aen Arg Bly Len Dye Leo Ile Aen Bin De Bern Bly Lys Gly Ser Ser Leu Gly Ala Val Ile Tyr <2108 180 (2118 24 (2128 PRT) (2138 Homo sapien <400> 180 Met Lys Arg Val Leu Ser Tyr Asp Leu Ash Leu Thr Ala Glu Lys Ser Ber Ile Phe Glm Leu Ser Ala Val 20 <210> 181 <211> 69 <212> PRT <213> Homo sapien 4400> 181 Met Ser Leu Ser Val His 3lm 3lm 3lm 3lm 7ys Thr Ala 3lm Arg Asp Pro 1 10 15 Gly Oln Leu Glu Gly Arg Gly Phe Ala Glu Val Pro Glu Pro Asp Gly Thr Leu Trp Cys Leu 3ly Arg Asn Leu Asp Phe 3ly Leu Arg 3ly Ser Arg His Val Gln Trp 3ln Gln Phe Gly Gln Gly Gly Asp Glu Leu Ser £ 3 5.5 Cys The Leu Leu Arg <212> FRT <213> Homo sapien

4012 180

Med Lys 31m 31m Ser Nin Lew 31m Ser Lew Tyr Tor 11e Cyc Thr Mal

May Tie Phe Lys

<210> 183 <211> 136 <212> PRT

<213> Homo sapien

4400x 183

Ash Glu Tyr Lys Ala Glu Ile Ala Glu Val Glu Arg Gln Ile Leu Gln

Gly Glu Gln Ser Tyr Ser Ser Ala Leu Glu Gly Met Lys Met Glu Ile

Ser His Leu Thr Gln Glu Leu His Gln Arg Asp Ile Thr Ile Ala Ser

Thr Lys Gly Ser Ser Ser Asp Met Glu Lys Arg Leu Arg Ala Glu Met 50 55 60

Oln Lys Ala Glu Asp Lys Ala Val Glu His Lys Glu Ile Leu Asp Gln 65 75 80

Led Glu Ser Led Lys Led Glu Ash Arg His Led Ser Glu Met Val Met 85 90 95

Lys Leu Glu Leu Gly Leu His Glu Arg Trp Gly Phe Thr Met Leu Ser

Ser Leu Val Leu Asn Phe Bly Ile Bln Ala Ile Arg Gln Pro Bln Arg 115 120 125

Pro Lys Val Leu Glu Leu Gln Val 130 135

<210> 184
<211> 47
<212> PRT

k2135 Homo sapien

<2223>

341.4 184

Met lys Ash Trp Arg Phe Ser Kaa Arg Bly Blu Arg Lys Trp Asp Ile

Lys Asn Asn Trp Lys Lys Ile Ala Glu Ile Val Leu Lys Leu Thr Asn

His Thr Lys Pro 3ln Asn Pro 3lu Ala Leu 3ly His Gln Ala Gly

k210: 185

·:211: 30

::212:- PRT

:213: Homo sapien

4400a 185

Met Tyr His Phe Tyr Asn Lys Glu Phe Ile Asn Arg Asn Lys His Ile

Leu Leu Leu Ala Ser Ala Ala His Ile Leu Glu Ile Ser Thr 20 25

k210> 186
k211> 86
k212> PRT

<213> Homo sapien

<400> 186

Ala His Cys Ser Phe Lys Leu Gln Ser Ala Ser Ash Leu Pro Thr Ser

Ala Ser Glm Val Ala 3ly Thr Thr 3ly Arg Arg His Glm Ala Arg Pro

ile Phe Val Phe Phe Val Glu Thr Arg Phe Arg His Ile Ala Gln Ala

3ly Leu 3lu Leu Leu Ser Ser Ser Asp Pro Thr Thr Ser Ser Ser 3ln 5.0 5 5

Ser Ala Gly Ile Ile Bly Val Thr Ala Ala Ala Gly Ser Gln Ala Val

```
Leu Phe Cys Ile Ile Arg
         <2110> 187
<211> 40
<211> FRT
<213> Home sapien
<400> 187
Met Phe Ser Lys Pro Gly Tyr Ser Jln Ser Leu Trp Leu Leu Met
Ser Phe Ala Gly Glu Ser His Glu Thr Val Leu Ile Cys Ala Tyr Ser
                         25
Pro Gln Cys Tyr Leu Ser Ala Leu
<210> 188
<211> 59
<212> PRT
<213> Homo sapien
44009 188
Met Arg Ile Ile Ser Thr Phe Cys Ser Tyr Gly Lys Asp Leu Lys Ala 1 5 15
Asp Ala Cys Ala Arg Asp Met Val Asp Thr Thr Tyr Ile Ala Val Met
                                 25
Ile Leu Leu Tyr Tyr Ser Val Leu Tyr Leu Leu Leu His Thr Leu Pro
Leu Fro Ile Met Thr Lys Ile Ile Thr Ala Tyr
                    5.5
.210» 189
.211> 35
.2125 PRT
.213% Homo sapien
<2220s
k021> MISC_FEATURE
<200> 81.. 151
<223> X=any amino acid
```

111 k000.*
.001.* M180_FEATURE
k222.* 34 ...34 RDDHU Wearly amino acid 4400 - 189 Met Arg Pro Phe Pro Val Val Maa Maa Maa Maa Maa Maa Maa Waa Val Phe Thr Ser Gly Glu Ala Ala Val Leu Leu Cys Leu Phe Leu Leu Cys Trp Kaa Val <210: 190 <211> 46 <212> PRT <213> Homo sapien <400: 190 Met Val Leu Lys Val Asn Ser Arg Met Val Ala Trp Val Phe Lys Val Trp Fhe Leu Leu Asn Ala Ser Gly Phe Leu Thr Asn Ile Lys Ser Lys Lys Lys Lys Ash Leu Leu Val Ala Ile Arg Arg Leu Glh 4.0 42105 191 <:2115 96 <2125 PRT <213> Homo sapien Met Ser Ser Pro Glin Phe Ser Leu Arg Val Phe Ala Phe Ser Leu Leu 1 5 10 15

Thr Ser Thr Pro Leu Met Ser Leu Pro Ile Ala Pro Asn Ser Gly Ser

Gln His Trp Tyr Ile 3ln Val Trp 3ln Arg Ala Ser Ser Thr Pro 3ly

Met Ala Ser Pro Lys Glm Glm Glm Glm Val Gly Glm Val Lem Phe Pro

5. <u>5</u>.

Sen Thr Ala Val Ala Leu Trp Trp Lys Val Arg Phe Fro Ash Jin Leu

Arg Arg Val 3ln 3ln Ala Thr Arg 3ln Val Asn Pro Fhe Thr Ser 3ly 8.5 9.5

<210h 192

<211: 54

<212:- PRT

:213: Homo sapien

<220:

<223: X=any amino adid

<400E 192

Met heu Phe Met Trp Lys Val Lys Phe Cys Phe Ile Met Glu Phe Cys 1 5 10 15

Phe Leu Tyr Ash Ser Phe Arg Xaa Ser Tyr Phe Ala Thr Ile Leu Tyr

Lys Ala Leu Arg Gln Val Met Val Ile Ile Leu Met Gln Asn His Leu 35 40

Gly Ser Gln Ser Leu Ala

<210: 193

k211: 57

<212: PRT

<213> Homo sapien

44005 193

Met Tyr Pro Leu Val His 3ly Arg Pro Ser Ser Ile Ser Arg 3ly 3ln

Val His Leu Val Arg Ala Gln Lys Leu His Ser Gln Thr Asn Glu Ser

Ser 3ln Asn Ile Phe Leu Arg Leu Trp Val Tyr Leu Tyr Arg Asn His 35 \$40\$

Trp Met Lad Leu Ser Led Pre Ser In-

3.0000 104

:2115 5T

<2120 PRT

<113> Home sapien

k400a 194

Met Tyr Pro Leu Val His Gly Arg Pro Ser Ser Ile Ser Arg Gly Gln

Val His Leu Val Arg Ala Gln Lys Leu His Ser Gln Thr Asn Glu Ser 25

Ser Gln Asn Ile Phe Leu Arg Leu Trp Val Tyr Leu Tyr Arg Asn His 40

Trp Met Leu Leu Ser Leu Phe Ser Phe

<210: 195 <211: 91 <212: PRT <213: Homo sapien

k433> 195

Met Gly Lys Glu Ala Ile Leu Ile Gly Pro Arg Glu His Val Gly Leu

Cys Leu Val Leu Val Thr Gly Ile Leu Tyr Thr Phe Ile Val Gly Glu

Lys Ala Ala Ile Thr Ser Ala Met Lys Val Leu Leu Ile His Gly Leu

Ash Ile Ile Blu Met Leu Leu Val Leu Cys Arg Ala Asp Ser Ser Arg 5.0 J.

Thr Lys Glu Trp Gln Ser Asp Glu Leu Arg His Ile Arg Asp Fro Thr

Val 3lm Met Met Thr 3lm Asm Leu Phe Leu Leu

<210> 196

44103 198

Met Arg Thr Ala Gln Gln Dys Ile Gln Arg His Glu His Leu Ala Ala

Let 31th Ser 31y Pro His Lys Phe 31y 31y Ile 31m Ala Let Pro Lys 25 $$30\,$

Ard Ala Gly Gly Cys Ser Phe Leu His Phe Leu Ser Gln Arg Pro

Arg Glu Leu Ser Pro Gin Thr Lys Gly Lys Gly Arg Leu Gln Ser Ser

Leu Tyr Leu Ala Leu Asn Ala Ser Ser Leu Cys Gly Pro Ala Arg 65 70 75

<2108 197 <3118 40 <2129 PRT <2139 Homo sapien

k4005 197

Met Thr Asp Ile Glu Trp Asp Cys Ser Arg Gln Met Gly Met Asn Gly

His Pro Thr Cys Lys Asp Thr Met Gly Ser Ala Asp Glu Met Gly Pro 20° -25°

Val Thr Glu Lys Leu Leu Pro Pro 3.5

%210% 198 %211% 40 %212% PRT

k213% Homo sapien

4009 198

Met Thr Asp Ile Glu Trp Asp Cys Ser Arg 3ln Met Gly Met Asn Gly

His Pro Thr Cys Lys Asp Thr Met Gly Ser Ala Asp Glu Met Gly Pro $$\tt 25$

Val Thr Blu Lys Leu Leu Pro Pro F2108 199 .1113 Yé .212. FRT <213 - Homo sapien <400% 199 Met Thr Leu Leu Leu Arg Arg Pro Glu Leu Trp Cys Cys Gly Met Thr Val Cys Leu Leu Thr Ser Ala Ser Ser His Ser Pro Pro Arg Ser Pro Tys Fro Thr Pro Gly Val Ser Arg Gly Arg Gln Val Thr Thr Met Leu 3.5 Arg Val Ser Asp Gly Pro Glu Ala Gly Leu Thr Gln Leu Tyr Pro Lys Ala Glu Ser Gly Ser Pro Arg Leu Ser Ala His Gly 70 4210> 200 <2115 78 <212 > PRT <213> Homo sapien :400> 200 Met Cys Asp Leu Cys Asp Arg Leu Glu Ser Cys Gly Lys Pro Val Leu Val Arg Glu Ser Leu Gly Pro Phe Pro His Arg Ala Leu Phe Ser Lys Ser His Ser Trp Val Thr Ash Val Asp Ala Bly Pro Met Pro Cys Pro Gly Gly Leu Ala Pro Gly Ser Pro Glu Asn Thr Ser Gly Arg Trp Glu Val Trp Trp Gly Sor Leu Ala Arg Val Asp Met Gly Gln Arg

<2100 201 <0010 505 <0010 FRT <2000 Home sapies

<4001 2011

Asp Ile Asn Asn Ala Trp Gly Cys Leu Glu Gln Val Glu Lys Gly Tyr

Glu Glu Trp Leu Leu Ash Glu Ile Arg Arg Leu Glu Arg Leu Asp His

Leu Ala Glu Lys Phe Arg 3ln Lys Ala Ser Ile His 3lu Ala Trp Thr 35 40 45

Asp Gly Lys Glu Ala Met Leu Lys His Arg Asp Tyr Glu Thr Ala Thr 55

Leu Ser Asp Ile Lys Ala Leu Ile Arg Lys His Glu Ala Phe Glu Ser

Asp Leu Pro Glu His Gln Asp Arg Ala Glu Gln Ile Ala Ala Ile Ala 8.5 9.0

Gln Glu Leu Asn Glu Leu Asp Tyr Tyr Asp Ser His Asn Val Asn Thr 100 105 110

Arg Cys Gln Lys Ile Cys Asp Gln Trp Asp Ala Leu Gly Ser Leu Thr

His Ser Arg Arg Glu Ala Leu Glu Lys Thr Glu Lys Gln Leu Glu Ala 130 135

Ile Asp 3lm Leu His Leu Glu Tyr Ala Lys Arg Ala Ala Pro Phe Asm 150

Asn Trp Met Glu Ser Ala Met Glu Asp Leu Gln Asp Met Phe Ile Val 165

His Thr Ile 3lu 3lu Ile 3lu 3ly Leu 1le Ser Ala His Asp 3ln Phe 185

Lys Ser Thr Leu Pro Asp Ala Asp Arg Glu Arg Glu Ala Ile Leu Ala

									117						
Ile	H18	Lys	31u	Alm	lln	Arg 215	Ile-	Alu	314	Ser	Asn 111	Hiz	11.	lys.	1.00
30.27 2.2.5	Зly	Ser	Asn	£ 210				Wal	Thr	Pro 235	Эln	He	:16	Asn	Serr 140
Lys	Trp	3lu	Lys	Va1 245	Glm	Gln	Leu	Val	Pro 250	Lys	Arg	Asp	His	Ala 255	Leu
Leu	Glu	Glu	Gin 260	Ser	Lys	Glm	Glm	Ser O65	Asn	3lu	His	Leu	Arg 270	Arg	Gln
Phe	Alā	Ser 275	Gln	Ala	Asn	Val	Val 280	317	Pro	Trp	Ile	Gln 285	Thr	Lys	Met
Glu	Glu 290	Ile	Gly	Arg	Ile	Ser 295	Ile	Glu	Met	Asn	Gly 300	Thr	Leu	Glu	Asp
Gln 305	Leu	Ser	His	Leu	Lys 310	Gln	Tyr	Glu	Arg	Ser 315	Ile	Val	Asp	Tyr	Lys 320
Pro	Aan	Leu	Asp	Leu 325	Leu	Glu	Gln	Gln	H18	Glm	Leu	Ile	Gln	Glu 335	Ala
Leu	Ile	Phe	Asp 340	Asn	Lys	His	Thr	Asn 345	Tyr	Thr	Met	Glu	His 350	Ile	Arg
Val	Gly	Trp 355	Glu	Gln	Leu	Leu	Thr 360	Thr	Ile	Ala	Arg	Thr 365	Ile	Asn	3lu
Val	Glu 370	Asn	31n	lle	Leu	Thr 375	Arg	Asp	Ala	Lys	Gly 380	Ile	Ser	3ln	3lu
Jln 385	Met	3ln	glu	Phe	Arg 390	Ala	Ser	Phe	Asn	His 395	Phe	Asp	Lys	Lys	31n 400
Thr	gly	Ser	Met	Asp 405	Ser	Asp	Asp	Phe	Arg 410		Leu	Leu	He	Ser 415	Thr
Glÿ	Tyr	Ser	leu 420	3ly	31u	Ala	3lu	Phe 425	Asn	Arg	Ile	Met	Ser 430	Leu	Val
Asp	Pro	Asn 435	His	Ser	317	Leu	Val 440	Thr	Phe	31n	Ala	Phe	Ile	Asp	Phe

Met Ser Arg 31. The ine Asp Thr Asp Thr Ala Asp 31m Val 11e Ala 450 455

Ser Phe Lys Val Leu Ala Bly Asp Lys Ash Phe Ile Thr Ala Blu Blu

Leu Arg Arg Glu Leu Pro Pro Asp 3ln Ala Glu Tyr Cys Ile Ala Arg 485 490

Met Ala Pro Tyr Glm Gly Pro Asp Ala Val Pro Gly Aia Leu Asp Tyr

Lys Ser Phe Ser Thr Ala Leu Tyr Gly Glu Ser Asp Leu **51**5 **52**0 **52**5

<210> 202

<211⇒ 83

<212: PRT

<213: Homo sapien

<400. 202

Met Trp Pro Gly Val Gly 3ln Lys Asn Leu His Lys Asp Arg Ile Leu

Phe Ser Glu Ala Lys Asn Ser Arg Gly Ala Thr Ile Arg Phe Phe Ser 25

Ala Val Gln Leu Gln Glu Met Leu Gly Ile Ser Tyr Asn Ser His Leu 4.5

Ser Lys Thr Tyr Pro Gly Arg Cys Ser Ala Phe Ser His Leu Gly Ala EC 55

Glu Gln Pro Tyr Ile Ala Val Tyr Ile Leu Thr Tyr Phe Pro Asp Phe 65 70 75 80

Leu Gly Gly

<210> 203 <211> 63 <212> FRT <213> Homo sapien

k400> 203

Met Trp Pro Bly Val Bly Bln Lys Ash Led His Lys Asp Arg Lie Led

Bhe Ser Blu Ala Lys Ash Ser Arg Bly Ala Thr Tle Arg Phe Phe Ser 21 25 31

Ala Val 3ln Leu 3ln 3lu Met Leu 3ly Ile Ser Tyr Asn Ser His Leu 3.5

Ser Lys Thr Tyr Pro Gly Arg Cys Ser Ala Phe Ser His Leu Gly Ala

Glu Gln Pro Tyr Ile Ala Val Tyr Ile Leu Thr Tyr Phe Pro Asp Phe

Leu Gly Gly

<210> 204

<211: 62 <212: PRT <213: Homo sapien

44005 204

Met Ser Leu Ser Val Leu Asp Ser Val Ala Gln Thr Arg Pro Phe Val

Cys Leu Phe Ser Phe Ser Ser Phe Val Asp Tyr Lys Phe Ser Leu Tyr

Ser Asn Lys Arg Fhe Ser Phe Gln Asn Leu Arg Gln Cys Ser Ser Leu

Lys Met Ile Leu Pro His Arg Trp Ser Arg Ala Ser Gln Trp 5.5

4210> 205

4211: 36

.212> PRT

<213 > Homo sapien

4400% 205

Met Cys 3lm Asm Ile Asp Thr Val Pro 3lu 3lu Ala Ser Lys His Asm 1 5 15

Lys Cys Tyr Phe Arg His Lys Leu Gln Asp Ser Leu Thr Ile Pro Ala

Acres to : .

Tys Let Ile dry 3 11

<4000 206

Met Ser Ser Ash Leu Cys Ser Trp Lys Pro Ser Tyr Gly Arg Val Phe

Pro Pro Ser Ser Ser Ala Phe Tyr Gln Arg Pro Tyr Ser Pro Pro Leu

Leu Gln Phe Gln Thr Ser Phe Leu Phe His Gln Lys His Ser Pro Ser

Ser Leu Val Ser Tyr Ser Phe His Thr Gln Lys Gln Asn Ile Phe Lys 5.5

Thr Phe Pro Lys Lys Glu Glu Lys Gly Asn Ser Lys Val His 7.0

<210> 207 <211> 78 <212> PRT <213> Homo sapien

k400> 207

Met Ser Ser Ash Leu Cys Ser Trp Lys Pro Ser Tyr Gly Arg Val Phe

Pro Pro Ser Ser Ser Ala Phe Tyr Gln Arg Pro Tyr Ser Pro Pro Leu 25

Leu 3ln Phe 3ln Thr Ser Phe Leu Phe His 3ln Lys His Ser Pro Ser

Ser Leu Val Ser Tyr Ser Fhe His Thr Gln Lys Gln Asn Ile Fhe Lys 55

Thr Phe Pro Lys Lys Glu Glu Lys Gly Ash Ser Lys Val His

*211 * 218 *211 * 18 *212 * PRT -218 - Himo supien 1411 - 116 Met The The Glu Leu Phe Trp Leu Ile Ile Ser Thr Asp Cys Leu <210:- 209 :2115 47 <212:- PRT <213: Homo sapien</pre> 4400× 209 Met Glu Arg His Thr Gln Ala Leu Cys Gly Arg Val Leu Ser Gly His Ser Glu Phe Arg Pro Gly Leu Trp Thr Ash Pro Ash Phe Ala Ser Ala Phe Val Ser Leu Val Lys Pro Val Phe Val Phe Ser Leu Leu Phe 35 ·**i** û <2105 210 42115 77 <212> PRT <213> Homo sapien k400x 210 Met Ser Ser Leu Leu Lys Glu Thr Phe Lys Gln Phe Ser Ser Leu His Cys His Leu Ala His Thr Ser Arg Ala Ala Gln His Leu Gln Gly 25 Leu Ser Phe Trp Ala Val Leu Arg Asp Ala Ala Gly Gly Ser Leu Ala 40 Phe Leu Bly Leu Leu Ser Bln Phe Pro Pro Val Leu Leu Ser Bly Cys Pro Ala Phe Bly Cys Trp Ile Leu Bln Val Pro Gln Arg

:213> Homo sapien 4411 + 211 Met Bly Blu Fro Bly His Blu Lys Blu Leu Pr. Ser Asp Ser Asm Ile Ser Leu Tyr Leu Phe Lys Val Cys Met Cys 3ln Thr Val Pro Ser Thr 2.5 Leu Tyr Thr Leu Ala Tyr Pro Val Leu Thr Asn Ile Ser Glu Met Gly Ile Thr Val Gin Phe Pro Asp Ile Val Ser Lys Ala Lys Pro Lys Pro 55 Val Cys Thr Arg Ala Cys Ala Leu His Thr Asp Trp Leu Ile 65 70 75<2109 212 <2119 61 <2120 PRT <213> Homo sapien R400: 212 Met Ser Arg Leu Pro His Thr Pro Ala Leu Ser Phe Pro Ser Gln Gly Ash Gly Ser Arg His Thr Pro His Leu Gly Gly Gln Ala Glu Phe Leu Ala Gln Gly Arg His Ser Glu Ser Val Glu Arg Lys Asn Asp Val Ala 35 Arg Thr Leu Leu Gln Val Ser Ile Gly Asn His Lys Pro 50 60

Met Lys Val Pro Glm Ser Pro Val Leu Glm Leu Leu Ala Glm Asp Leu

10

<400> 213

Ser Ser Arg Glo Lys Arg 11e Ash Thr Thr Pr. Lys Gly Glo Lys Leo 11 25 31

Led Led Ser Ser Ser Gly Asp Led Ala His Gly Gly Pro Ash Gly Gly

Pro Ser Leu Ile Ser Ash Ser Pro Ala Ash Ser Pro Leu Asp Thr Arg 5.0 5.5

Ala Sly Lys Thr Leu Pro Sln Sly Sln Slu Sly Met Phe Val Ser

<2108 214 <2118 40 <2128 PRT <2138 Homo sapien

4400: 214

Met Arg Asp Gly Pro Pro Phe Gly Pro Pro Trp Ala Lys Ser Pro Glu

Leu Glu Ser Ser Ash Phe Ser Pro Leu Gly Val Val Leu Ile Leu Phe 20 25

Ser Leu Glu Leu Lys Val Leu Gly

<2105 215

%2115 72 %2125 PRT

k213: Homo sapien

k4005 215

Met Leu Lys Asn Ser Ser Tyr Asn Leu Phe Tyr Asn Ile Tyr Ser Cys

Thr Tyr Phe Tyr Ile Leu Ser Phe Ile Phe Val Phe Val Ser Phe Ala 20 25 30

Thr Leu Cys Thr Ser Leu Ser 3lu 3lu 3ln Ser Fhe Ser Pro Phe Tyr

Thr Leu Ash Lys Tyr Leu Ash Ser Tyr Tyr Ser Leu Ile Leu Tyr Lys

```
Ala Asp Ser Ash Tie Bly Ser Thr
2211. 216
4400H 216
Met Ser Trp Leu Leu Ser Tyr Sln Asn Leu Gly Val Ser Tyr Arg Cys
            5
                             10
<210: 217
<211: 39
:212: PRT
<213: Homo sapien</pre>
<400: 217
Met Leu Ser Trp Asn Cys Tyr Ser Pro Pro Ile Ser Ser Leu Ser Ile
1 5 10 15
Tys His Pro Asn His Leu Glu Ala Leu Val Leu Asp Ala Leu Gln Tyr
          20
                         25
Phe The Phe Leu Phe Phe Glu
 3.5
42109 218
42119 24
42129 PRT
:213: Homo sapien
1400: 218
Met Ash Asp Arg Ala Arg Leu Ser Leu Ser Glh Lys Lys Thr Glu Arg
                    * 4
Glu ser Leu Glu Thr Ard His Ser
       20
42223
HERE MISC_FEATURE
12221 128 11.79
<223> X=any amino acid
```

k411> 219

Met Asp Arg Ala Leu Pro Leu Trp Bly Ser Bln Blu Pro Ser Blu Pro

Ser 31n Ile Ala Leu Val Ser Ile Leu Val Leu Xaa Xaa Xaa Xaa Xaa 25

4√.

70

Ile Lys Ile Gln

(210) 220 (211) 32 (212) FRT

<213 Momo sapien

+: 2 2 0 s

:221: MISC_FEATURE

+:222 > (31)...(31) +:223: X=any amino acid

k4005 220

Met Lys Ile Thr Ser Cys Val Tyr Thr Ile Cys Leu His Leu Ala Asn

Thr Gly Leu His Asp Ser Thr Phe Ala Ash Tyr Leu Trp Leu Xaa Ash 20 2.5

..210» 221

%211% T86 %212% PRT

<213> Home sapien

4400> 221

Arg Fro Leu Arg Ser Leu Lys Val Ile Tyr Asp Gly Leu Met Ala Leu I $_{\rm S}$

- Prie Thr Thr Ser Leu lle Ala Leu Leu Ser Ser Arg Gly Lys Ash Val 2. 51
- Ala lie 3lu Tyr lie Lys lie His Thr lie 3lu Lys 3lu Asp Val His 35 45
- Phe Cys Lys 31n Lys Ile Thr Asn Arg Met Leu Lys Leu Lys Leu Asp 50 55
- Twr Glu Glu Ser Pro Val Tyr Gln Val Tyr Val Gln Ala Lys Asp Leu 60 70 75 80
- Gly Pro Asn Ala Val Pro Ala His Cys Lys Val Ile Val Arg Val Leu 85 90 95
- Asp Ala Asn Asp Asn Ala Pro Glu Ile Ser Phe Ser Thr Val Lys Glu
- Ala Val Ser Glu Gly Ala Ala Pro Gly Thr Val Val Ala Leu Phe Ser
- Val Thr Asp Arg Asp Ser Glu Glu Ash Gly Gln Val Gln Cys Glu Leu 130 135 140
- Leu Gly Asp Val Pro Phe Arg Leu Lys Ser Ser Phe Lys Ash Tyr Tyr 145 150 155 160
- Thr Ile Val Thr Glu Ala Pro Leu Asp Arg Glu Ala Gly Asp Ser Tyr 165 170 175
- Thr Leu Thr Val Val Ala Arg Asp Arg Gly Glu Pro Ala Leu Ser Thr 180 190
- Ser Lys Ser Ile 3lm Val 3lm Val Ser Asp Val Asm Asp Asm Ala Pro-195 200 205
- Arg Phe Ser 3ln Pro Val Tyr Asp Val Tyr Val Thr 3lu Asn Asn Val 213 200
- Fro Gly Ala Tyr lle Tyr Ala Val Ser Ala Thr Asp Arg Asp Glu Gly
- Ala Ash Ala Gin Leu Ala Tyr Ser Ile Leu Giu Cys Gin Ile Gin Gly
 245 250

Met	Ser	T \$1	Phe 170	Thr	Tyr	Val	Ser	116 261		Sex	30 tr	Asn	31.7 27.1	Tyr	Let.
Tyr	Ala	1.64 275	Às g	Ser	ine	ÀSĮ	Tyr 2el	alu	3ln	Leu	Lys	Asp 289	Phe	Serr	Phe
3ln	Val 290	Glu	Ala	Arg	Asp	Ala 295	Gly	Ser	Pro	Jln	Ala 300	Leu	Ala	317	Asn
Ala 305	Thr	Val	Asn	lle	Leu 310	Ile	Val	qsA	31n	As:: 315	Asp	Asn	Ala	Pro	Ala 320
ne	Val	Ala	Pro	Leu 325	Pro	Gly	Arg	Asn	Gly 330	Thr	Fro	Ala	Arg	Glu 335	Val
Leu	Pro	Arg	Ser 340	Ala	Glu	Pro	Gly	Tyr 345	Leu	Leu	Thr	Arg	Val 350	Ala	Ala
Val	Asp	Ala 355	Asp	Asp	Зly	3lu	Asn 360	Ala	Arg	Leu	Thr	Tyr 365	Ser	ile	Val
Arg	31y 370	Asn	31u	Met	Asn	Leu 375	Fhe	Arg	Met	Asp	Trp 380	Arg	Thr	Gly	Glu
Leu 385	Arg	Thr	Ala	Arg	Arg 390	Val	Pro	E.A.	Lys	Arg 395	Asp	Pro	Gln	Arg	Pro 400
Tyr	Gla	Leu	Val	11e 405	314	Val	Arg	Asp	His 410	31.7	Gln	Pro	Fro	Leu 415	Ser
			420					425					430		Pro
		435					440					445			Arg
Pro	4 50					455					460				
Leu 465	lle	lle	Ala	Leu	Gly 470	Ser	Val	Ser	Phe	11e	Fhe	Leu	Leu	Ala	Met 480

Ile Val Leu Ala Val Arg Cys 3ln Lys 3lu Lys Lys Leu Asn Ile Tyr

490 4 = 1.

				45					₹.T.					* J* i.	
Thr	Dys	Leu	Ala 601	Ser	Asp	Cys	2ys	Leu Bos	Cys	Cys	Cys	Cys	Cys 510	Зly	gly
31y	31 y	Ser 515	Thr	Jye	Cys		Arg 621	3ln	Ala	Arg	Ala	Arg 525	Lys	Lys	Lys
Leu	Ser 530	Lys	Ser	Asp	Ile	Met 535	Leu	Wal	3ln	Ser	Ser 540	Asn	Va:	Pro	Ser
As:: 545	Pro	Ala	Gln	Val	Pro 550	Ile	Glu	3lu	Ser	317 555	Gly	Phe	Gly	Ser	His 560
His	His	Asn	Gln	Asn 565	Tyr	Cys	Tyr	Gln	Val 570	Cys	Leu	Thr	Pro	Glu 575	Ser
Ala	Lys	Thr	Asp 580	Leu	Met	Phe	Leu	Lys 585	Pro	Cys	Ser	Pro	Ser 590	Arg	Ser
Thr	Asp	Thr 595	Glu	His	Asn	Pro	Cys 600	Gly	Ala	Ile	Val	Thr 605	Gly	Tyr	Thr
Asp	Gln 610	31n	Pro	Asp	Ile	Ile 615	Ser	Asn	Gly	Ser	Ile 620	Leu	Ser	Asn	Glu
Thr 625	Lys	His	Glm	Arg	Ala 630	Glu	Leu	Ser	7,7	Leu 635	Val	Asp	Arg	Pro	Arg 640
Arg	Val	Asn	Ser	Ser 645	Ala	Phe	Gln	Glu	Ala 650	Asp	Ile	Val	Ser	Ser 655	Lys
Asp	Ser	gly	His 660	Зlγ	qsA	Ser	glu	Gln 665	gly	Asp	Ser	Asp	His 670	Asp	Ala
Thr	Asn	Arg 675	Ala	gl:	Ser	Ala	Gly 680	Met	Asp	Leu	Phe	Ser 685	Asn	Cys	Thr
3lu	31u 690	Cys	Lys	Ala	Leu	3.45 6.75	His	Ser	Asp	Arg	J∵s =00	Trp	Met	Pro	Ser
Phe 705	Val	Pro	Ser	Asp	gly Tip	Arg	31n	Ala	Ala	Asp -15	Tyr	Arg	Ser	Asn	Leu T20

His Val Pro Bly Met Asp Ser Val Pro Asp Thr Blu Val Phe Blu Thr

Pro 31u Ala 31n Pro 31y Ala 31u Arg Ser Phe Ser Thr Phe 31y Lys 745 750

3lu Lys Ala Leu His Ser Thr Leu Glu Arg Lys Glu Leu Asp Gly Leu 760 755

Leu Thr Asn Thr Arg Ala Pro Tyr Lys Pro Pro Tyr Leu Ser Pro Tyr 770 780

Leu Thr 785

<210> 222

<211> 80 <212> PRT

<213> Homo sapien

<400> 222

Met Tyr Lys Arg Arg Ser Cys Lys Ile Ala Pro Ile Glu Ser Glu Leu 1 5 7 %

Glu Asn Leu Glu Glu Cys Ala Leu Thr Asn Ala Pro Phe Ser Ser Lys

Ala His Phe Phe Leu Gln Thr Lys Leu Leu Glu Gln Val Asp Tyr 35

Thr Phe Cys His Ser His Val Trp Lys Asn Lys Asn Gly His Lys Leu

Phe Ala Ala Pro Tyr Val Lys Ser Trp Ser Pro Leu Ala Gly Cys Gly 75

<210> 223

<2115 87 <2125 PRT

<213> Homo sapien

k400% 223

Met Ser His Pro Phe Leu Ala Ile Leu Sly Cys Trp Thr Ser 3ln Leu 1 10 15

His Phe Leu Leu Ser Cys Leu Asn Phe Tyr Leu Ser Thr Glu Thr Leu

- -2.8

Let Thr Thr Tyr Lys Arg Ala Gly 11e Ser Pro Let Asp Pro Thr Ile 3.5

Pro Ser Ser Ser Leu Phe Leu Cys Ile Leu Leu 3lm 3lm Thr Ser 3lu

My Phe Phe Leu Ser Pro Ile Ser Leu Pro Leu His Leu Gly Phe Cys 65

Leu Arg His Phe Asn Lys Thr 8.5

<210> 224 <211> 61 <212> PRT

<213: Homo sapien

42201

<221> MISC_FEATURE

R400H 224

Met Thr Gln Leu Ile Cys Thr Xaa Gln His Asp Gln Asn Gln Asn Val

31n The Fhe Glu Ser Arg His Ile Thr Thr Val Asn His Ile Leu Ser 25

Tyr Lys Ala Thr Glm Glu Ile Leu Lys Ile Glu Ile Ile Val Ile Phe

Tyr Tyr Ser Ala Phe Lys Ile 3lu 1le Asn Lys 3lu Leu 50 60

.210> 225 .211> 78

4212: FRT

<213> Homo sapien

<400> 225

Met Phe Met Val Ser His Leu Ala Pro Arg Ser Leu Asm Arg Ser His

Led Led His His Led Val Led Lys His Led Tyr Lys Mct 3ln Phe Thr

lie Lew His Ser Val Bin Phe Asp Pro Phe Bin Ile Bin Tyr Met Bin

Thr Phe Pro Bly Bly Asp Val Arg Leu Arg Thr Thr Lys Tyr Val Phe

Dys Asn Ile Glu Ser Ile Ser Pro Ile Val Asn Ala Leu Ser

<2108 226 <2119 38 <2129 PRT <2139 Homo sapien

:400: 226

Met Leu Ala Asn Met Val Val Tyr Thr Lys Ala Leu Tyr Asp Gl
n Leu . $$\rm S$$ 15

Val Asn Lys Ser Leu Tyr Asn Cys Lys Gly Lys Ile Lys Thr Asp Leu 20 25 30

Leu Lys Gln Tyr Thr Ile

:210> 227 :211> 45 :212> PRT :213> Homo sapien

R4009 227

Met Pro Leu Trp Gln Arg Glu Phe Ser Ash Lys Thr Glu Leu Gly Arg

Arg Glu Trp Asn Tyr Leu Leu Ile Ser Tyr Cys Asp Ile Arg Tyr Cys 20 25

Tyr Ile His Leu Ser Leu Trp Tyr Leu Leu Asn Asn Trp 35 43 45

<210> 228
<211> 67
<212> PRT

<213> Homo sapien

<400 + 20t

Met Bly Led Asp Phe Pro Phe His Ala Glo Lys Lys Led Ser Led Arg 1 5 10 18

Glu Cys Ala Glu Gin Ser Gly Pro Arg Lys Ala Thr Thr Asn Ile Leu 20 25 30

His Ala Lys Lys Glu Ala Lys Glu Glu Val Glu Leu Tyr Pro Asn Met 35 40 45

Led Ile Ile Gly Val Ile Led Ala Glu Led Val Arg Pro Pro Gly Gly 80 60

Gln Gly Ile 55

<210: 229

<211> 76

<212> PRT

<213: Homo sapien

4400% 229

Lys Asn Lys Gln Lys Lys Lys Arg Lys Lys Arg Lys Lys Arg Lys Lys 15

Arg Lys Lys Arg Lys Arg Lys Arg Lys Arg Lys Lys Lys Arg Arg 20

Arg Lys Lys Glu Arg Lys Arg Glu Asp Ser Thr Asn 45 $^{\circ}$ 75

A210: 230

4400% 230

Met Glu Met His Gly Asn Ala Phe Val Ser Thr Val Leu Glu Arg Leu

Lys His The Ile <2109 231 <4000 231 Met Pro Leu Gln Gly Pro Gln Phe Glu Lys Tyr Tyr Leu Val Lys Phe Trp Leu Leu Cys Lys Asn Phe His Ser Leu Thr Gln Ala Ser Gly Thr 20 25 30 Ala Tyr Phe Leu Thr Leu Thr Leu Leu Lys Leu Phe Gln Ser Leu Leu Cys Leu Gln Ala Leu Glu Thr Glu Glu Arg Asn Phe Thr 5.5 :210: 232 :211: 39 -212: PRT :213: Homo sapien -400: 232 Met lle Tyr Gly Ile Ile Gly Ile Phe Ile Phe Asn Thr Ile Tyr His . $$\tt 5\tt$ Phe Ser Gly Leu Thr Leu Ser Asp Leu Phe Gly Ile Phe Ser Leu Met 2.5 Thr Lys Phe Ile Asn Gln Trp 3 = k2105 233 <211> 42 %212:- FRT <213> Homo sapien <400> 233 Met Phe His Arg Ile His 3ly 3ln Arg Ile Arg 3ln Ala Phe 3lu Met 1 5 15

Ash Arg Ile Ser Leu Thr Ser Pro Ser Phe Cys 3ln Phe Val Leu Phe

3 . 1.5

les Ser His Ile His Gli Lett Ser Ert Ser 3.5

<210> 034 <211> 40 <212- PRT <213> Homo sapien

<4000 234

Met The His Arg Ile His 31y Gln Arg Ile Arg Gln Ala Phe Glu Met

Ash Arg Ile Ser Leu Thr Ser Pro Ser Phe Cys Gln Phe Val Leu Phe 25

Leu Ser His Ile His Gln Leu Ser Pro Ser

<210> 235 <211> 37 <212> PRT <213> Homo sapien

-0400H 235

Met Leu Met Ash Val Lys Val Ala Lys Thr Jln Ala Leu Thr Ile Leu

Met The Leu Leu Phe Lys Thr Asp Leu Tyr Gly 3ln Lys His Arg Asn

Mly Ser Ser Arg Phe 3.5

42125 PRT

k213: Homo sapien

42201

<221> MISC_FEATURE

4223:

<2223 .116116

RDDBA - Keamy amind adid

+001+ +001+ MISC FRATURE +000+ 131 ...181

-2239 Meany amino amid

<400> 236

Met Lys Pro Ser Leu Cys Pro Arg Ala Val 3ln Ala Ala Ala Val Ala

Pro Thr Ash Ser Gln Glu Thr Tyr Ser Val Pro 3ln Gly Arg Cys Arg

Trp Gln Pro Trp Pro Arg Pro Ala His Arg Lys Pro Thr Leu Cys Pro

Gly Ala Gly Ala Gly Gly Ser His Gly Pro Asp Gln Leu Thr Gly Asn

Leu Leu Cys Cys Pro Arg Gly Xaa Cys Arg Arg Gln Pro Trp Pro Arg 75

Pro Ser Ser His Glu Ash Leu Ser Leu Leu Pro Pro Gly Ala Ile Ala

Arg Arg Gln Ala Met Ala Pro Thr Ser Ser Gln Glu Thr Tyr Ser Val

Pro Pro Gly Xaa Leu Pro Leu Ala Ala Met Ala Pro Asm Glm His Thr

Bly Lys Xaa Thr Gly Thr Leu

<210> 237 <211> 419 <212> PRT <213> Homo sapien

<400> 237

Met Ala Pro Tho Ser Ser 3lm 3lm Tho Tyo Ser Val Pro Ang 3ly Ang 1 5 13

Cys Arg Glm Glm Fro Trp Pro Arg Pro Ala His Arg Lys Pro Ser Leu

	- .		î.	<u> </u>
Cya Più Aig 85	Ala vai gin	Ala Ala 40	Ala Val Ala Pr	: Thr Ser Ser 31n 4:
Gla The Tye 50	Ser Val Pro	Gln Gly	Arg Cys Arg Tr 60	p 31n Pro Trp Pro
Arg Pro Ala 65	His Arg Lys	Pro Thr	Leu Cys Pro Ar 75	g Ala Bly Ala Bly 60
Gly Ser Arg	Gly Pro Asp 85	Gln Leu	Thr Gly Asn Le 90	u Leu Cys Ala Leu 95
Gly Gln Gly	Arg Cys Arg		Pro Trp Pro Ar 185	g Pro Ala Pro Thr 110
Ser Leu Ser 115	Cys Ser Arg	Ser Ala 120	Pro Gly Pro Al	a Pro Ser Gly Pro 125
Arg Gly Lys 130	Thr Pro Ser	Ser Pro 135	Thr Leu Ser Pr 14	o Ser Arg Sly Ser 0
Pro Leu Beu 145	Leu Arg Glu 150	Pro Ser	Leu Val Thr As 155	p Ser Leu Glu Ala 100
His Arg Gly	Ser Leu Ala 165	Pro Gly	Val Leu Trp Th 170	r Ser Gly Thr Ala 175
Ser Gly Ser	Lys Ala Ala 180		Pro Gln Glu Gl 185	y Leu Met Thr Glu 190
Leu Glu Ser 195	Cys 3ly 3ly	Arg Thr	Ala Thr Gly Pr	o Cye Leu Pro Thr 205
3ly Ser Glu 210	Arg Pro Ser	Leu Arg 215	Leu Pro Gly Fr D2	o Cys Pro Ser Val C
31y His Ser 225	Jlm Ala Leu 230	gly Glm	Arg Lys Gln Fh	e Arg Glu Thr Ala 24:

Sin Ala Arg Lys Ala Sin Val Ala Trp Siu Pro Arg Ser Ala Siu Ile 080 086 Sin Len Sin Lys Sin Sin Ala Try Fro Sly Fro Fro Ala Ser Lys Lly 245

Glu Arg Bin Ala Pro Gly Val Bly Ser Bly Val Leu Bly Pro Hos Bin

Thr Bly Ile Phe Pro Pro Leu Pro Bly Bly Bly Ala Gly Arg Ala Ser 298 300 290

Pro Ala Glu Ala Pro Gly Ser Val Arg Ash Ash Arg Lys Gly Ser Arg 305 310 315 320 315

Gly Thr Gly Thr Ser His Thr Pro His Pro Val His Pro Ile Gly Pro 325 330

Ile His Pro Val His Pro Val Tyr Pro Ile Tyr Arg His Phe Pro Leu 340 345

His Ser 3ln Leu Ser Arg Leu Leu Thr Leu Glu Glu Leu Asn Ser Gly 355 360

Led Ala Ser Cys Led Gin Cys Gly Thr Led Cys Ser Ser Thr Trp Glu 370 380 380

Pro Gln Gly Ala Arg Ser Val Gly 11e Cys Thr Leu Pro Leu Thr Glu 390

Ile Tyr His Ala Glu Thr Ser Asp Leu Arg Gly Thr Ser Ala Gly Pro 405 415 415

Tro Val His

<210> 236
<211> 59
<212> PRT

<213> Homo sapien

<400> 238

Met Val Ser Asn Asn Tyr Leu Thr Gly Phe Trp Leu Gly Ile Phe Leu

Leu Pro His Thr Val Pro Val Blu Ash Val Glu Val His Phe Bly Leu 25

Tyr lie Pho Met Lys His Leu Blu Bly Trp Bly Bly Dly Dys Bln Val

Ser Lys Ser Arg Lys Met Tyr She Val Arg Leu 88

<2109 239 <211> 59 <212> PRT <213> Homo sapien

:400> 239

Met Val Ser Asn Asn Tyr Leu Thr 3ly Phe Trp Leu Gly Ile Phe Leu

Leu Pro His Thr Val Pro Val Glu Ash Val Glu Val His Phe Gly Leu 20 25

Tyr Ile Phe Met Lys His Leu Glu Gly Trp Gly Gly Gly Cys Gln Val **4**0 **4**5

Ser Lys Ser Arg Lys Met Tyr Phe Val Arg Leu 83

<210> 240
<211> 73
<212> FRT
<213> Homo sapien

4400> 240

Met Ash Val Leu Pro Leu Lys Lys Ash Gln Leu Ser His Ile Thr His

Ile Tyr Ile Leu Leu His Asn Asn Val Leu Asn Trp Thr Thr Val Asn 20 30 25

31n Arg Val Ile Ala Ala Ser 31u 31y Asp Arg Leu Leu Thr Phe Arg 35 40 45

Tyr Cys Leu Met Pro Gly Lys Pro Trp Glu Pro Arg Gln Val Asn Leu 50 60

Thr Lys Leu Leu Leu The Ser Gln Leu

.210> 241

```
<011> "3
%LLLS PRT
%L13 + Home sapien
.4.0 - 241
Met Aan Val Leu Fro Leu Lys Lys Ash 3ln Leu Ser His Ile Thr His
ile Tyr Ile Leu Leu His Ash Ash Val Leu Ash Trp Thr Thr Val Ash
            20
31n Arg Val ile Ala Ala Ser 31u 31y Asp Arg Leu Leu Thr Phe Arg
Tyr Cys Leu Met Pro Gly Lys Pro Trp Glu Pro Arg Gln Val Asn Leu EO 60
Thr Lys Leu Leu Leu Phe Ser Gln Leu
<210:- 242
:2205
R2218 MISC FEATURE
{<}223{\,\times} {\,\times} X=any amino arid
4:220:
.2215 MISC_FEATURE
42225 .41...,51
<:223: X=any amino acid</pre>
422235
RIDIE MISC FEATURE
       - · · · · · ·
-223 - X=any amino acid
42234
<201> MISC_FEATURE
R2225 (11)...11)
\sim 223 \sim - X = any - amino - acid
<221> MISC_FEATURE
<222> 15'...15'
<223> X=any amino acid
```

```
DIS MISS PEATURE
DDS DT ...DD
 -223> Kaany amino abid
:4005 242
Met Kaa Thr Kaa Kaa Pro Kaa Ser Trp Met Kaa Ala Phe Lys Kaa Asp
Maa Maa Maa Maa Maa Arg Trp Ash Leu Ser lie Arg Gly Ser Phe
                          25
Ala Thr Asp Phe Ser Asn Gly
       3.5
<210> 243
<211> 81
<212> PRT
<213> Homo sapien
4400> 243
Met Ile Ile Tyr Asn Tyr Asn Val Tyr Cys Phe Thr Tyr Ile Phe Pro
Lys Tyr Thr Ile Asn Ala Leu Pro His Phe Ala Leu Phe Thr Lys Tyr
ile Leu Glu Ile Ile Leu Tyr Ser Tyr lle Lys Ser Phe Ile Val Pro
        3.5
                             40
Phe Tyr Gly Cys Lys Met Phe Gln Lou Met Asp Gly Leu Ile Leu Tyr 80 80
Arg Ala Thr Leu Arg Leu Cys Pro Ile Leu Leu Phe Leu Ile Leu Leu 65 75 80
Lys
```

<213> Homo sapien

<2200>

2212 MISC FRATURE DESCRIPTION

(203) Meany emine abid

44003 244

Met Ser Gly Glu Leu Dys Ala Gly Ala Gin Gly Pro Gin Gly Leu Val

Glu Gly Met Lys Cys Ala His Ile Lys Arg Lys Val Ala Met Gln Ser 25 30

Lys Blu Gly Gln Val Gln Met Cys Ser Val Asn Leu Ile Leu Arg Glu 35 40 45

Gly Arg Gly Phe Gly Leu Gly Gln Asp Pro Lys Glu Gly Ala Glu Asp 55 55

Met Glu Leu Glu Ala Val Arg Lys Val Val Phe Xaa Glu Gly Ala Val 75 55

Leu Thr Arg Pro Leu 85

<210> 245
<211> 70
<212> PRT

(213) Homo sapien

<220>

k4005 245

Met Ser Thr Phe Thr Phe Thr Ala Lys 3ln 3ly Fhe 3ln Val Val Phe

3.5

Glu Ser Pro Ash Ash Pro Met Lys Tyr Glu Arg Phe Leu Glu Arg Leu 5.5

```
Led Val 410 Lys Val Thr
k2115 246
<213% Homo sapien
:220:
<223> X=any amino acid
:400x 246
Met Val Pro Gly Gly Gln Arg Ala Gly Gly Leu Cys Leu Lys Arg Ser
Leu 3ln Ile Val Phe Glu Lys Ile Thr Gln Asn Gln Pro Trp Xaa Tyr
Leu Arg Gln Glu Gly Lys Tyr Phe Lys Arg Leu Cys Glu Phe Val Ser
                          40
Val His Leu Phe Phe Val Glu Tyr Ile Leu Leu Ile
   50
                      5.5
4400% 247
Met Gln Gln Asp Ser Tyr Ser Val Asn Trp Tyr Ser Leu Tyr Arg Gly
Gin Leu Lys Lys His Phe Phe Asp Gln Ala Ile Pro Leu Leu Gly Ile
                              2.5
His Pro Thr Asp Ile Leu Ser His Ile Leu Lys Asn Arg Pro 3ly Thr
                  4.0
%210% 248
%211% 103
%212% PRT
~213> Homo sapien
k400> 248
```

ile Ile Leu A.a Leu Phe Arg Asp Arg Mal Wer Bro Wer Phe Arg Leu I II II Ala Tyr Ser Bly Ala Ile Met Ala His Cys His Leu Bln Leu Leu Bly Leu Arg Asp Pro Pro Thr Ser Ala Ser Ala Val Ala Gly Ser Thr Gly 3.5 Gln Cys His His Gly Trp Ala Asn Ala Ala Lys Phe Leu Phe Ser Ile 80 60 Glu Ile Gly Leu Cys His Phe Ala Gln Ala Gly Leu Glu Leu Val Gly Ala Ser Asn Fro Ala Pro Ser Thr Ser Gln Ser Pro Gly Ile Thr Gly 85 90 ° 95 Val Ser His Cys Ala Trp Pro <210> 249 <211> 38 :212> PRT <213> Homo sapien 4400> 249 Met Trp Tyr Met Thr Ile Phe Pro Gly Trp Val Glu Gly Glu Val His 1 5 10 15 Arg Asp Ser Trp Val Lys Lys Ser Leu Tyr Ser His Leu Leu Leu Lys Ala Lys Ser Pro Val Gly 35 4210> 280 %211> 56
%212> PRT
%213> Homo sapien 4220% RDDD MISC_PEATURE <223> X=any amino acid

+411+ 251

Met Phe Thr Asp Val Le. Flu Le: Lys Val Maa Maa Maa Maa Maa Maa Mab L

Maa Xaa Xaa 31n Asp Met Ser Lys Tyr Ala Trp Leu Phe Ser 11e Met 23 30

Tys Met Leu Ser Ile Ser Leu Leu Ser Val Leu Gly Val Glu Leu Thr

Mal Leu Gly His Phe Ile Glu Phe

R210H 251 <:211:- 37</pre> <:212: PRT

<:213: Homo sapien</pre>

+c400: 251

Met Phe Pro Gly Asn Ile Phe Phe Asn Phe Pro Arg Ser Ser Leu Tyr

Ser Arg Gln Thr Ser Leu Ala Val Ser Gln Ile Gly Gln Ala His Ser

Cys Ile Arg Ala Phe

k4005 252

Met Val Lys Lys Val Leu Ile Leu Met Thr Leu Tyr 3ln Asn Lys Ala 1 5 15

Ser Asp Ile Ser Leu Gly Leu Tyr Leu Asp Asp 3ln Leu Thr

k400> 253

Met Val Lys Lys Val Led 11- Led Met Thr Led Tyr 31n Ash Lys Ala - -Ser Asp lie Ser Leu Bly Leu Tyr Leu Met lie Ser - - -- - - k211% 284
k211% 19
k010% PRT
k213% Homo sapien <4000 254 Met Arg Ash Trp Leu Ile Ser Arg Glu Ash Ser Lys Ala His Arg Lys Ber Arg Cys <210: 255 <211: 19 <212: PRT <213> Homo sapien :4000 255 Met Arg Ash Trp Leu Ile Ser Arg 3lu Ash Ser Lys Ala His Arg Lys 10 Ber Arg Cys <210> 256 :211: 93 <2125 PRT <213> Homo sapien <400> 256 Met Phe Ser Ser Ala Ash Ser Ile Leu Gly Ala Leu Leu Ile Trp Ala Gly Met Ser Trp Leu Pro Ile Glu Ala Val Cys Arg Tyr Pro Leu Pro Ala Ser Val Fro Ser Glu His Arg Arg Asp Leu Pro Cys Val Ser Leu 2 % His Fro Trp Leu 3lm 3ly Ser Ser Cys Cys Leu Leu Trp Ser Trp Trp May Fro Hos Tys Hos Fro Top The Fro Ser Tys Arg Glo Pro Ala Val

Led Ser Ala Led Gly Gly Gly Gly Ala Led Trp Led Gys 8.5

<2105 257

<2115 121 <21125 PRT <21135 Homo sapien

:400x 257

Met Phe Ser Ser Ala Asm Ser Ile Leu Gly Ala Leu Leu Ile Arg Ala

Gly Met Ser Trp Leu Pro Ile Glu Ala Val Cys Arg Tyr Pro Leu Pro 25

Ala Ser Val Pro Ser Glu His Arg Arg Asp Leu Pro Cys Val Ser Leu

His Fro Trp Leu 3ln 3ly Ser Ser Cys Cys Leu Leu Trp Ser Trp Trp 5.0 55

3ly Pro His Cys His Pro Trp Ile Pro Ser Cys Arg Gln Pro Cys Cys

Pro Gln Cys Thr Gly Arg Arg Gly Cys Ala Val Val Val Leu Ser Leu

His Arg Cys Pro Leu Val Gly Leu Glu Trp Gly Phe Leu Ile Pro Pro

Ser Met Trp Ile Glu Phe Arg Gly Leu 115 120

42105 258

4400> 258

Met Lys Val Gln Gly Ala Asp Val Ala Ala Ala Ala Ser Tyr Gln Glu

Tyr Leg The Lyr <2000 D59 K2115 KT K2125 PRT <2130 Homo sapien <400h 259 Met Met Pro Ala Trp Val Val 3ly Trp Val Gly Ala 3lu Ser Thr Pro 1 5 10 15 Ala Pro Leu Met Lys Arg Sly Sly Arg Cys Phe Leu Ser Leu Val Leu Met Cys Pro Leu Gly Trp Trp Gln Leu Gly Leu Leu Arg Ala Thr Pro 3.5 Ser Thr Met Pro Leu Leu Ile Ala Lys Ala Ser Ala Tyr Pro Pro Val Leu Asn Thr -65 42104 260 <4001 260 Met Ber Phe Gln Val His Pro Ser Ile Leu Lys His Lys Tyr Pro Thr The Leu Ash Ash Phe Arg Thr Lys Ile Ash Ile Leu Thr Arg Lys Lys His Ala Met Thr Ser Cys Asn Leu Ile Lys Lys Asp Lys Glu Trp Ser 4.0 Leu

<213> Homo sapien

onlos Chis Mish FRATURE Chis Ca II ha

«213» X=any amin. arid

<4115 261

Met The Thr Phe Leu Tyr Leu Val Ile Thr Blu Thr Ash Cys Leu Val

Thr Phe Blu Ile Ash Blu Ser Maa Leu Ser Bln Cys Mal Ile Asp Ash 23

k210> 262

<211> 47

<212: PRT

<213> Homo sapien

<400: 262

Met Ser Ser Met Glu Glu Ala Phe Gly Ser Glu Met Ash Cys Pro Arg

Ser Arg Gly Glu Glu Deu Gly Pro Gly Leu Thr Gly Phe Cys Ser Val

Mal Leu Ser Arg Pro Trp Phe Leu Leu Tyr Pro Gly Gly Ala Phe

<210> 263
<211> 69
<210> PRT
<213> Homo sapien

4400> 263

Met Ala Val Leu Lys Thr Trp His Lys Tyr Met Ser Cys Ala 3lu Thr 1 5 10 15

Gly Val Ala Pro Ser Phe Ile His Gly Asp Trp Gln Val Thr Thr Pro 25

Ala Pro Ala Pro Ser Cys Ile Pro Leu Ile Val Arg Lys Arg 3lu 3ly 3.5 4 C

Pro Ser Cys Leu Cys Pro His Ala Cys Val Thr Ala Ser Leu Phe Thr 5.0 5.5

```
31n Arg Val Val Phe
      274
19
< 1. T. C.
      FAT
<2130 Homo sapien
<220.
k221s MISC_FEATURE
k222s 4 . .4
k223s X=any amino abid
k220 h
<221% MISC_FEATURE
4220:
:221: MISC_FEATURE
\pm 2225 \pm (22)^{	ext{T}} , 221
:223> X=any amino acid
+12201
<223> X=any amino acid
.220:
.2219 MISC_FEATURE .2229 421 ...421 42239 X=any amino acid
4:220s
<:221: MISC_FEATURE</pre>
42225 (46) . 47)
<223> X=any amino acid
4:220 h
4221 MISC FEATURE
R2229 (821). 821
<223\% X=any amino acid
<22235s
02235 - Xeany amino acid
3400> 264
```

Met Try Pro Xaa Try Pro Ary Maa Lys Pro Ely Blo Lys Blo Lys Ely

Fro Ash Phe Phe Phe Maa Val Trp lie Val Phe Ser Trp Lys Ash Ash.

Led Bly Cys Pro Ash Maa Cys His Phe Maa Thr Val His Maa Maa Ile 35 40 45

Thr Ser Ser Waa Met Ser Waa Asp Thr Asp Thr 3ly Ser Ash Let Thr 50 60

Leu Tyr Ser Met Thr Gly Leu Lys Ile Arg Pro Lys Gly Ile Ile 65 70 75

<210> 265 <211> 25 <212> PRT <213> Homo sapien

+:400: 265

Met lle Ser Glu Lys Leu Gly Gly Val Lys Cys Pro Gly Lys Lys Gly

Leu Gly Leu Gln Arg Tyr Thr Gln Met 20 25

00105 266 02115 59 02125 PRT 02135 Homo sapien

k4005 266

Met Ala Thr Thr Leu Thr Leu Ala Tyr Tyr Leu Ile 3ln Leu Fro

Ser Lys Thr Asp Thr Sor Phe Leu Leu His Phe Asp Ile Ile Cys Oln

Val Cys Phe Ile Pro Ser Tyr Ile Lys Ash Glu Ser Thr Val Gln Leu 35 $-4.5\,$

Tyr Ser Arg Arg His Leu Ser Tyr Lys Thr Val 5.5

k210> 267

klife Homo sapien

4000 4 460

Met hed Phe The The Val Asp The Lys Ser Blu His The Arg Thr Met 15

Lys lie Phe 3in Arg Thr Ser Asp Ser Val Leu Leu Thr Phe Ala Tyr

Oly His Ser Asp Thr lle Thr Ser Ser Ala Tyr Leu Ile Cys Arg Tyr

Leu Asp Ser Ash Gln Asp Leu Glu Ash Gln Arg Phe Arg Glu Ash Lys 55

Lys Lys Leu Arg Lys Ala Gln Asn Met Gln Phe Ser Lys Ile Phe Arg

Leu Ile His Lys Tyr Ser Thr Cys 9.5

<210> 268
<211> 46
<212> PRT

<213 = Homo sapien

<4005 268

Met His His Ser Asn Thr Phe Leu Arg Val Lys Val Ile Ile Lys Asn

Tyr Leu Tyr Leu Leu Lys Tyr Ser Leu Lys Leu Trp Phe Leu Met Ser

Tyr Tyr Ser Ile Phe Glu Gly Ile Met Leu Tyr Leu Ile Asn 3.5

44008 269

Met Ser Leu Phe Lys Met Ser Phe Thr Ser Ala 3ly 3ln 3lu 3ln Ser

Tyr Met Ala Tyr Fro Din Met Pro Pro Phe Val Eng Thr Met The Ala Ash Bin Bin Leu Thr Thr Bin Ser Leu Val His Pro Val Thr His Ser Let Lys Pro His Phe Ile Phe Pro Gly Phe Phe Ile k2108 270 (211: 69 2111 FKT <213: Homo sapien</pre> <220b :223> X=any amino acid 44003- 270 Met Cys Glu Lys Phe Tyr Ile Lys Cys Xaa Lys Lys Ile Ser Ala Ser Met Arg Leu Pro Arg Ash Leu Gly Ala Phe Ile Lys Ile Thr Pro Ash Lys Arg Ash Tyr Arg Arg Lys Lys Glu Lys Met Lys Thr Arg Thr Phe Glu Leu Lys Asn Thr Val Glu Lys Lys Phe Met Glu Lys Met Gln Lys 5.5 Phe Lys Ile Lys Ile 4210» 271 .2115 96 .2125 PRT k213% Homo sapien 4400> 271 Met Pro Val Tyr Ser Leu Leu Gin Ile Pro Pro Gly Glu Ala Thr Leu Lys Ile Pro Asp Lys Leu Lys Phe Ile Asn Leu Ile Leu Leu Ser Pro

Val Ser Er (11e 11e Val Er) lie Ala Arp Thr (1e Er) Ash Let His

Ser Cys Ser Ala Arg His Slu Ser Arg Lys Trp Bly Leu Ile Leu Pic 50 - 60

Ala Thr Leu Val Ser Ash Tyr Ser Glu Lys Glu Val Asp Val Leu Ile 65 70 75 76

Asp Gly Lys Tie Gin Met Ilo Pho Leu Gly J.u Ile Pho Leu Arg Ser

<210> 272

<211: 48

<212: PRT

<213: Homo sapien

<400: 272

Met Gly Tyr Ile Leu Lys Leu Phe His Tyr Leu Asn Pro Leu Val Ser 1 5 10 15

Val Val Leu Leu Ser Lys Glu 3ln Ser Phe Phe Phe His Thr Asn

Gly Val Gly Gln Ash Ile Lys Ala Ser Val Ile Trp Lys Ser Ser Arg

A210: 273

%2115 38 %2125 PRT

<213 > Homo sapien

<4001 273

Met Asn Phe Tyr Arg Pro Arg Asn Ser Ser His Tyr Leu Thr Asn Phe 1 10 15

Ser Val Cys Val Glu Thr Val Thr Ser Leu Tyr Ser 3lu Gly Ile Ala 20 25 30

Thr Tyr Asn Val Thr Asn

3 =

4210s 274

<211> 42

<212> PRT

-213> Homo sapi+n

.40,, 274

Met Ala Ala 11e Ser Arg Pr. Val Lys Ile His Leu Fri Lys 3lu Asn 1 10 15

This Ser Phe Phe Phe Phe Trp Arg Trp Ser Phe Ala Leu Val Ala 2.5

31n Ala 31y Val Pro Arg Pro Arg Pro Arg 35 42

:400: 275

Met Leu Phe Trp Thr Leu Gly Ser Val Ile Tyr Tyr Val Cys Pro Ser 1 10 15

Cle Glu Val Ser Leu Thr Leu Ser Lys lle Pro Phe Thr Asn
20 25 30

R210: 276

%211> 244 %212: PRT

<213> Homo sapien

k400> 276

Leu Leu Sly Thr Ala Phe Sln Leu Phe Sly Tyr Slu Slu Asn Ala Val

Gln Ser Leu Gln His Leu Leu Lys Fhe Met Ala Ser Asn Lys Ala Ala 23 25 30

Ala Asp Asp Ala Ser Val Ala Ala Ala Ala Glm Ser Phe Glm Arg 35 40 45

Led 31d Led 31d Asp Met 31d Ala Led Ser Led Trp 31d Lys Phe Arg 50 60

Asp Leu Ser Ile 3lu Glu Tyr Ile Arg Val Tyr Lys Arg Leu Gly Val 65 75 82

Tyr Phe Asp Glu Tyr Ser Gly Glu Ser Phe Tyr Arg Glu Lys Ser Gln

± € ê E

Hig Wal her bys her her Hig Ser bys Hig ber hed bed bys Thr Ilk 111 115 115

Lys Bly Thr Ala Val Val Asp Led Ser Bly Ash Bly Asp Pro Ser Ser

Ile Cys Thr Val Met Arg Ser Asp Bly Thr Ser Leu Tyr Ala Thr Arg 135

Asp Leu Ala Ala Ala Ile Asp Arg Met Asp Lys Tyr Asn Phe Asp Thr

Met Ile Tyr Val Thr Asp Lys Gly Gln Lys Lys His Phe Gln Gln Val

Phe Gln Met Leu Lys Ile Met Gly Tyr Asp Trp Ala Glu Arg Cys Gln

His Val Pro Phe Gly Val Val Gln Gly Met Lys Thr Arg Arg 3ly Asp 195 200 205

Val Thr Phe Leu Glu Asp Val Leu Ash Glu Ile Gln Leu Arg Met Leu

Gln Ash Met Ala Ser Ile Lys Ser Glu Phe Ser Phe Phe Leu Leu Lys 230 235

Ser Leu Lys Ser

<210% 277 <211% 35 <212% PRT <213% Homo sapien

<4009 277

Met Met Gly Leu Leu Glu Ala Trp Ile Pro Gln Asp Ser Thr Ala Glu

Trp Ser Asn Thr 3ly Ser Thr Ala Asn 3ln Arg 3ln Cys Tyr Ile Leu

Arg Glu Ile

3 =